

STUDY OF FACTORS INFLUENCING PERINATAL MORTALITY

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**M.D. BRANCH – I I
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**GOVT. R.S.R.M. LYING-IN HOSPITAL AND
GOVT. STANLEY MEDICAL COLLEGE & HOSPITAL
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CERTIFICATE

This is to certify that the dissertation entitled “**STUDY OF FACTORS INFLUENCING PERINATAL MORTALITY**” is the bonafide original work of **Dr. Rathi Ramakrishnan** in partial fulfilment of the requirements for **M.D. Branch – II (Obstetrics and Gynaecology)** Examination of the Tamilnadu Dr. M.G.R. Medical University to be held in March 2007. The period of study was from April 2005 to March 2006.

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ABBREVIATIONS

| | | |
|------|---|----------------------------------|
| RDS | : | Respiratory Distress Syndrome |
| HMD | : | Hyaline Membrane Disease |
| HIE | : | Hypoxic Ischemic Encephalopathy |
| MSAF | : | Meconium Stained Amniotic Fluid |
| MAS | : | Meconium Aspiration Syndrome |
| SGA | : | Small for Gestational Age |
| IUGR | : | Intra Uterine Growth Retardation |
| PROM | : | Premature rupture of membranes |
| BA | : | Birth Asphyxia |
| MRO | : | Membranes Ruptured Outside |
| VC | : | Vaginal Cephalic |
| VB | : | Vaginal Breech |
| AB | : | Assisted Breech |
| PT | : | Pre-Term |
| T | : | Term |
| IUD | : | Intra Uterine Death |

INTRODUCTION

Perinatal mortality rate is the yardstick of obstetric and pediatric care before & around time of birth.

Perinatal mortality rate is the most sensitive index of health status of women and quality of maternal and child health service. It is directly related to various high risk maternal factors, diseases and fetal factors viz- birth weight and gestational age etc. More number of perinatal deaths usually occur among those mothers who suffer from multiple problems of social, biological and pathological origin. Physical standard of life is probably the most important single variable determining the perinatal loss.

In developed countries, perinatal mortality rates have gradually declined during the past decades. Due to improved obstetric, perinatal care and technologies PMR has declined to a level of 15 to 20/1000 total births, and is still decreasing. A risk factor is defined as any ascertainable character or circumstance of person or group of such persons known to be associated with abnormal risk of developing or being adversely affected by a morbid process (WHO 1973). Risk factors can be cause or signals which are identifiable before the event, they predict such factors may characterise the individual, family community or environment of the disorder of infancy and childhood as well as study of epidemiology of each defined outcome within the local setting thus the

chain of events can be established and the relevant risk factors for each outcome are defined and qualified.

The risk factors in single or in combination, affect the outcome of pregnancy in relation to predictable variables such as perinatal deaths, low birth weight (LBW) and low APGAR scores. Low socio economic status, poverty, malnutrition, illiteracy, traditional misbeliefs and customs are the social risk factors which lead to increase in perinatal mortality.

REVIEW OF LITERATURE

Mortality rates are the good indicators to measure the level of health and health care in different countries. With marked reduction in maternal and infant mortality rates in the developed countries, attention has now been drawn to the problem of perinatal mortality during the last two decades.

The MMR is an index of the socio-economic status of the country. The perinatal mortality rate gives an idea of the standard of perinatal services available. The term "perinatal mortality" includes both late fetal deaths (L.F.D.) and early neonatal deaths (E.N.D.).

The eighth revision of the international classification of diseases (ICD) defined the perinatal period as lasting from the 28th week of gestation to the seventh day after birth. The ninth revision (1975) of ICD added that.

- I. Babies chosen for inclusion in perinatal statistics should be those above a minimum birth weight i.e. 1000gms at birth (A birth weight of 1000gms is considered equivalent to gestational age of 28 weeks).
- II. If the birth weight is not available, a gestational period of atleast 28 weeks should be used.
- III. Where (i) and (ii) are not available, body length (Crown to heel) of atleast 35cm should be used. But the preferred criterion is birth weight.

The conference for the Tenth Revision has (ICD-10) made no changes to these definitions.

DEFINITIONS

PERINATAL MORTALITY RATE

PMR is defined as the number of late foetal deaths plus the deaths in the first week of life (END) per thousand total births.

EXTENDED PERINATAL MORTALITY RATE

It includes deaths of all fetuses and new borns weighing >500gms (GA-20 weeks / crown heel length 25cm, when birth weight is not known) whether born alive or not (as per ninth revision of ICD WHO 1977).

For international comparison LFD and END of 1000gms is considered.

Although, perinatal period occupies less than 0.5% of average life span, there are more deaths within this period than during the next 30-40 years of life.

LFD and END are combined in perinatal mortality rate because the factors responsible for these two types of deaths are often similar. The proportion of deaths which occur after birth are incorrectly registered as still

births, thereby inflating the still birth rate and lowering the neonatal death rate. The PMR, being a combination of still births and early neonatal deaths, is not influenced by this error, by removing the dividing line between a still birth and a live birth with death shortly after birth.

Perinatal mortality is a problem of serious dimensions in all countries. It now accounts for about 90% of all fetal and infant mortality in the developed country.

The perinatal mortality rate vary from less than 10 in Japan, the nordic countries and Germany to as high as 80 or even 100/1000 births in the least developed countries.

DISTRIBUTION

P.M.R. IN ASIA - 59/1000 BIRTHS (1995)

| Regions | PMR/1000 births | Countries | PMR/1000 birth |
|-----------------|------------------------|------------------|-----------------------|
| South Asia | 87 | Bangladesh | 85 |
| South East Asia | 52 | Pakistan | 70 |
| | | Burma | 51 |
| East Asia | 20 | India | 46 |
| | | Srilanka | 25 |
| | | Japan | 5 |

In most developing countries, the PMR is 35-60 per 1000 births. In PMR is about 46 (1995), but varies from 24.8 in Kerala to 75.5 per 1000 in Orissa (Rural-54.4, Urban-32.4).

A number of social and biological factors are known to be associated with perinatal mortality. The degree to which these factors, influence perinatal mortality varies from country to country. Many of these factors also endanger the life of mother causing high maternal mortality.

The major causes of perinatal loss includes prematurity, LBW, perinatal asphyxia and certain maternal factors which result in increased risk of perinatal loss. An appreciation of these factors will certainly make the greatest impact of reducing perinatal mortality.

Identification of high risk factors

According to ICMR (1990), the risk factors could be classified according to the level of competence required to identify them.

- a) Risk factors identified from obstetric history.
- b) Factors detected on clinical examination and/or during pregnancy monitoring.
- c) The use of modern technologies such as ultrasound or Doppler to identify high risk pregnancies.

The classifications of perinatal deaths by obstetric cause or by fetal / neonatal factors are helpful from the obstetrician's and pediatrician's points of view to assign the cause of perinatal death.

Though autopsy is of great help to determine the perinatal pathology,

analysis of obstetric or fetal factors are useful to find out why the baby died.

The important obstetric causes of perinatal death are maternal diseases like anemia, ante partum hemorrhage (A.P.H.), hypertensive disease, difficult labour, etc. In about a third of the cases, no cause is found.

When analysed according to the fetal and neonatal causes of PMR the leading factors are birth trauma, asphyxia, prematurity congenital malformations, infections, respiratory distress and others.

High risk factors influencing pregnancy outcome

A. Universal (socio-economic factors)

1. Maternal age : Below 16 years, over 35 years.
2. Parity : Nullipara, parity 4+
3. Social class : Low, malnutrition
4. Height: Short stature below 140 cms.

B. Reproductive history: (Bad obstetric history)

1. Prolonged period of infertility, Habitual abortions.
2. Previous intrauterine death, still birth, neonatal death.
3. Previous difficult delivery or caesarian, III stage complications.
4. Birth weight less than 2.5 kg or more than 4 kg.

C. Present pregnancy factors

1. No prenatal care

2. Diseases complicating pregnancy : anemia, HT, TB, diabetes, heart disease, renal disease, jaundice, malaria.
3. I.U.G.R. : Preeclampsia, Eclampsia, prolonged pregnancy, Rh isoimmunisation.
4. A.P.H.
5. Twins, hydramnios, congenital anomalies.
6. Malpresentations : breech, transverse lie etc.

D) Factors in labour

1. Prolonged rupture of membranes (I.P. sepsis)
2. Cord complications
3. Prolonged labour, asphyxia
4. Unskilled birth attendant
5. Place of delivery (domiciliary)

E) Fetal factors

1. Prematurity
2. RDS (respiratory distress syndrome)
3. Infections
4. Low-birth weight.

F) Unknown factors

Not clinically ascertainable.

Socio-economic status

Due to poor income and housing, the newborns in the poorest families

are smaller, like their own mothers (Baird, 1985), three times more likely to die perinatally than those born in the highest income group. Metha and Jayant (1981) in their perinatal survey found that rural women those with low education and manual workers were at the highest risk of perinatal death and also the same result was obtained by Gopalan (1982) in his study.

Literacy : In places where the female literacy rates are high as in Srilanka, Thailand, In India (Kerala), the PMR is low (In Kerala 85% women are literate and PMR three times lower than Orissa).

Maternal age and parity

PMR is high at the extremes of the reproductive age (18 and 35 years), in increased parity when greater than para 5 and when the interval between child births are less than two years (Roy Chowdhery and Sikdar 1981, Metha Jayant 1981).

ANTENATAL CARE (BOOKED CASE)

If there are adequate number of antenatal visits commencing from early pregnancy. There is better quality of care resulting in less number of PMR (Ren-Ying Yanet, 1989). In those with 5 or more visits the PMR was 2-3 times lower than who had fewer visits. Poor maternal care receptivity (MCR) leads to high PMR (W.Bharadwaj and S.B.Hasan 1998).

PREECLAMPSIA : (MILD AND SEVERE) (7-10% OF PMR)

Pregnancy induced hypertension (PIH) and preeclampsia are commonly occurring maternal diseases which will increase perinatal deaths. During

routine antenatal visits if patients are found to have BP > 140/90 (for the first time after 20 weeks) with oedema and proteinuria - are labelled as preeclampsia. In preeclamptic patients IUGR babies, preterm babies and perinatal deaths are common. In Eclampsia, perinatal mortality increases steeply.

MATERNAL ANAEMIA

Prevalence of Anaemia (Hb<11gms WHO) is highest among pregnant women in developing countries. In India and neighbouring countries anaemia is seen in 33-88% (WHO 1992). In India, the prevalence of anaemia in middle income group ranges between 20-30% and in low social economic 40-60%. In our country nutritional anaemia (iron deficiency) is more common. This is aggravated by Hookworm infestation and repeated pregnancies. There is usually 2 to 3 fold increase in perinatal mortality rate, when maternal Hb level falls below 8gms/dL and 8 to 10 fold increase when Hb falls below 5gms/dL (Severe). Significant increase in low birth weights, increased in prematurity and IUGR has been reported when Hb level is below 8 gms/dL (Moderate and severe).

ANTEPARTUM HAEMORRHAGE (APH)

Antepartum haemorrhage is still a grave obstetric emergency contributing to a significant amount of perinatal mortality and morbidity in our country. If pregnancy is complicated by bleeding during the second or third trimester, the rate of preterm delivery and perinatal mortality are atleast

quadrupled. APH is traditionally defined as any bleeding from the genital tract occurring after 28 weeks but before the onset of labour. APH comprises about 2-5% of all pregnancies. When the cause of APH cannot be identified with certainty it is labelled as unclassified (30-50%).

APH - Causes

1. Placenta praevia
2. Abruptio placentae
3. Bleeding due to vasa previa, rupture of marginal sinus
4. Unclassified.

MULTIPLE PREGNANCIES

Multiple pregnancies are at risk of being associated with increased perinatal morbidity and mortality throughout pregnancy and infancy. Complications such as PROM, pre eclampsia and anaemia contributed to increased perinatal deaths either from the complication per se or from indirect result of preterm deliveries.

PROM

Prelabour rupture of membrane is defined as spontaneous rupture of the chorioamnion before the onset of uterine contractions. Low socio-economic

status is an important risk factor for both PROM and preterm labour. Perinatal mortality is mainly due to sepsis and respiratory distress. The risk of neonatal Infections after PROM is increased with prematurity and the presence of chorioamnionitis especially, if there was a prolonged interval between the first vaginal examination and delivery. Perinatal asphyxia may occur secondarily to cord compression or prolapse, malpresentation and chorioamnionitis.

MAL PRESENTATION

Compared to vertex presentation, the risk of perinatal mortality is seven fold higher in transverse lie and four fold higher in Breech (when delivered vaginally). For assisted breech delivery, assessment of pelvis, fetal size will help in decision making. There is increased perinatal mortality in breech deliveries (if delivered vaginally).

OBSTETRIC HISTORY

The outcome of previous pregnancies like

| | |
|---|-----------------------------------|
| 1. Recurrent abortions | relevant to the current pregnancy |
| 2. Previous still birth or neonatal death | |
| 3. Preterm labour | |

which will increase the perinatal mortality.

NEONATAL / FETAL FACTORS

Birth weight: This is influenced by two major mechanisms:

1. Duration of pregnancy
2. Intrauterine growth rate

This varies according to several factors.

1. Health and nutritional status of women before conception.
2. Energy demands during pregnancy.
3. The growth energy and nutrient demands of fetus and placenta.

Poor nutritional status, anaemia, teenage pregnancy, PIH, short birth interval, infectious and heavy work, all will increase IUGR. PMR is inversely proportionate to birth weight.

Low birth weight : The first new born weight obtained after birth is less than 2500 gms.

Very low birth weight: The first new born weight obtained after birth is less than 1500gms.

Extremely low birth weight: The first new born weight obtained after birth is less than 1000 gms.

Prematurity

It is defined as babies delivered before 37 completed weeks from the first day of last menstrual period. Both prematurity and IUGR are associated with increased neonatal morbidity and mortality.

Jefostene Ashok (1994) : shorter the gestational duration higher the neonatal mortality.

Meena J.Jotwarie (1997) : Both the incidence of preterm labour and perinatal mortality go in a co-existing manner.

Causes for early neonatal death includes

- Extreme prematurity
- Birth Asphyxia
- Respiratory distress
 - HMD
 - Aspiration pneumonia
 - Pulmonary Hemorrhage
- Infection
- Hypothermia
- Hyperbilirubinemia
- Intracranial hemorrhage
- Congenital anomalies
- LBW-etc.

APGAR Score

The mortality is increased geometrically with decreasing 5 minute APGAR scores. When it was 5 or less, Asphyxia is one of the important causes of perinatal mortality. Birth Asphyxia is a preventable problem and is one of the major causes of perinatal mortality and morbidity. Severe hypoxia may lead to still birth or neonatal death. The assessment of asphyxia is mostly based on the APGAR Scoring System.

Perinatal Asphyxia is defined as an insult to the fetus or newborn arising from lack of oxygen or lack of perfusion to various organs causing tissue hypoxia and acidosis.

Causes of Asphyxia

- | | | |
|-------------------|---|--|
| Mother | - | Hypotension and shock |
| | - | Anaemia, CVS disease |
| | - | Respiratory disease |
| | - | Malnutrition |
| | - | Prolonged uterine activity |
| Placental factors | - | Premature separation |
| | - | Vascular degeneration and Infarction |
| | - | Chronic Placental insufficiency |
| | - | Cord Compression |
| Fetus/New born | - | Extreme Prematurity |
| | - | CNS problems (Intracranial Birth injury, |

hemorrhage)

- Meconium Aspiration Syndrome [MAS]

PREVENTION OF PERINATAL MORTALITY

Female Literacy

In the developing countries where the female literacy rates are high, as in Sri Lanka, Thailand, and the state of Kerala in India, the birth rates and the reproductive mortality rates (PMR and IMR) have been low. In Kerala where over 85 per cent of women are literate, the PMR is three times lower than in Orissa and Uttar Pradesh where female literacy is less than 15-20 percent. The educated mothers assume greater responsibilities in planning their families and also in availing themselves of the prenatal care services. Educating the girls till late adolescence also helps in delaying their marriage and avoids problems of early teenage pregnancy.

Improved health education

Health education should emphasise the need for early booking, avoidance of drugs and infections in early pregnancy, prenatal visits at least 4-5 times before term, a trained birth attendant at delivery, breastfeeding and Postpartum contraception, as these contribute to reduction in the perinatal and infant mortality rates.

Risk screening in MCH care

Risk screening and organisation of referral linkage systems with supportive transportation services for the high risk mothers and infants reduces not only the antepartum fetal deaths but also the intrapartum and neonatal losses in most developing countries. The introduction of 'Home Based Mothers Record' for this purpose has reduced not only the maternal death rates but also the perinatal mortality by early detection and treatment of these high risk cases at appropriate levels (Abraham *et al.*, 1991). Where the risk score continued to be high throughout pregnancy, the PMR was the highest (12.1 per cent) compared to 1.1 to 3.3 percent in those whose scores were low during pregnancy - Ying Van *et al.*, 1989).

Better intranatal care

The majority of births in the rural areas of the developing countries are unattended by trained birth attendants. As a result, intrapartum deaths due to trauma/anoxia and sepsis are common. It is necessary to train thousands of additional health workers or midwives to staff the peripheral MCH centres. The physicians, the 'first referral levels' should also be trained in the 'essential obstetric functions' to reduce the maternal and perinatal mortality rates (WHO, 1986) Ultrasonography may be useful in lowering the PMR but continuous electronic fetal monitoring may help to lower perinatal morbidity than mortality (Leveno *et al.*, 1986).

Immunisation of pregnant mothers

Immunisation of pregnant mothers against tetanus is about 30 per cent in Indonesia (Grant, 1991), while in Singapore more than 90 per cent of mothers embarking on a pregnancy are already immunised. In some parts of India and Pakistan, neonatal tetanus continues to be responsible for 20 per cent or more of the neonatal deaths. These deaths are easily preventable by antenatal immunisation of mothers, cleanliness during delivery and care of the umbilical cord at birth.

Regionalisation of perinatal care

This refers to the redistribution of mothers and infants to appropriate levels of care by provisions of access to better neonatal services at sub district levels and intensive neonatal care at higher levels. They claim that this type of regionalisation of care has contributed to lowering of PMR should be carefully evaluated as low perinatal mortality rates have also been claimed with improvement in socio-economic conditions and with no extra inputs in MCH services (Editorial, Lancet, 1986). However, well trained staff and well equipped neonatal units are necessary at major centres not only to serve as referral centres but also to supervise the neonatal services out in the periphery.

Prevention of LBW

For this, the critical time for nutritional intervention is inter pregnancy

interval or early in pregnancy. Liberalisation of maternity benefits, social support during pregnancy with nutritional supplements, exemption from strenuous work in the second half of pregnancy and free or subsidised perinatal care closer to home have lowered the PMR in several socialist countries. In some, as in Sweden, the mother is given an extended period of leave to stay at home and look after the infant.

Perinatal audit

Though there is no doubt that the maternal mortality audit has contributed remarkably to the prevention of maternal deaths, it is controversial whether the perinatal audit (or confidential enquiry) is equally effective. It is limited in scope though useful in preventing some of the avoidable causes (Kirkup, 1990). In one such study of perinatal mortality in nonmalformed term babies, no cause could be found in 40 percent of perinatal deaths, and in 60 percent of them, the avoidable factors were related to intrapartum management (Kirkup and Welch, 1990).

AIM OF STUDY

The present study was conducted to find out.

- Perinatal mortality in our hospital
- To study the risk factors influencing the perinatal mortality with particular reference to maternal factors in our institution.

MATERIALS AND METHODS

This study was done in Govt. Raja Sir Ramasamy Mudaliar Lying-in Hospital, Royapuram, Chennai – 13 during the period from April 2005 to March 2006.

Our hospital is attached to Government Stanley Medical College. A special newborn care unit is attached to our hospital and pediatricians are available throughout 24hrs. Our tertiary care hospital receives cases from all over Tamilnadu and Southern Andhra. Out of our patients 95% belong to low socio economic group.

During the above period we had 521 perinatal deaths out of 12864 deliveries the cause of death was ascertained by a detailed maternal history and clinical examination in both late fetal deaths and in early neonatal deaths. (END). The perinatal deaths were analysed with special reference to mortality related to birth weight and gestational age. Gestational age in LFD from the day of LMP and in END by the “Dubowitz” scoring.

PMR was calculated by late fetal deaths plus early neonatal deaths of babies weighing more than 1000gms. (28 weeks of gestation or more at birth)

per 1000 total births. (LFD and END during the period 28 weeks of gestation to 7 completed days were included).

Babies weighing less than 1000 gms and below 28 weeks of gestation were excluded.

A sample study of 1000 consecutive deliveries in our institution (during the period from January 2006 to February 2006) was carried out, in which all the newborn babies were followed till discharge of the mother and followed up after 28 days in well baby clinics. All high risk babies were admitted in our newborn care center and treated till they become alright and then were discharged.

OBSERVATION

PART-I

Duration of study : April 2005 to March 2006.

Total no of deliveries : 12864

Total number of births : 13019

Twins : 143

Triplets : 3

Number of late fetal deaths : 354

(LFD)

Number of early neonatal deaths : 167

(END)

Total : 521

Perinatal mortality rate : 31.75

TABLE – 1

| Division | LFD | END | Total | Percentage |
|-----------------|------------|------------|--------------|-------------------|
| Total | 354 | 167 | 521 | |
| Sex Male | 207 | 97 | 304 | 58.38 |
| Female | 147 | 70 | 217 | 41.62 |
| Gestational Age | | | | |
| Pre term | 236 | 70 | 306 | 58.73 |
| Term | 110 | 94 | 204 | 39.15 |
| Post term | 8 | 3 | 11 | 2.1 |
| Birth wt in gms | | | | |
| 1000 – 1499 | 116 | 44 | 160 | 30.7 |
| 1500 – 2499 | 161 | 72 | 233 | 44.72 |
| > 2500 | 77 | 51 | 128 | 24.56 |
| LBW | | | | |
| < 2500g | 277 | 116 | 393 | 75.4 |

TABLE – 2
OBSTERIC COMPLICATIONS ASSOCIATED WITH PERINATAL
MORTALITY

| Division | LFD | END | Total | Percentage % |
|--------------------------|------------|------------|--------------|---------------------|
| MATERNAL FACTORS | | | | |
| Anemia (Hb<8gm) | 90 | 35 | 125 | 24 |
| Preeclampsia | 62 | 19 | 81 | 15.5 |
| APH | 40 | 21 | 61 | 11.7 |
| BOH | 32 | 7 | 39 | 7.4 |
| Hydramnios | 18 | 1 | 19 | 3.6 |
| RH negative | 9 | 3 | 12 | 2.3 |
| Multiple preganacy | 8 | 13 | 21 | 4 |
| Prolonged pregnancy | 12 | 12 | 24 | 4.6 |
| Eclampsia | 4 | 3 | 7 | 1.3 |
| Heart disease | 2 | 1 | 3 | 0.5 |
| Diabetes mellitus | 2 | 1 | 3 | 0.5 |
| Epilepsy | 3 | 2 | 5 | 1 |
| Jaundice | 3 | 1 | 4 | 0.7 |
| FACTORS IN LABOUR | | | | |
| Malpresentation | 34 | 17 | 51 | 9.7 |
| PROM | 16 | 8 | 24 | 4.6 |
| Cord around neck | 18 | 12 | 30 | 5.8 |
| Obstructed labour | 8 | 4 | 12 | 2.3 |
| I.P. Sepsis | 11 | 7 | 18 | 3.5 |
| Rupture uterus | 3 | 2 | 5 | 1 |
| Cord prolapse | 4 | 2 | 6 | 1.2 |

PART – II

Sample study of 1000 consecutive deliveries to know about the frequency of important maternal risk factors and their association with perinatal mortality was done.

Duration of study January 2006 to February 2006

| | |
|----------------------------|------|
| Total number of deliveries | 1000 |
| Total number of births | 1008 |
| Twins | 8 |
| Late fetal deaths | 19 |
| Early neonatal deaths | 10 |
| Male | 536 |
| Female | 472 |
| Unbooked cases | 148 |
| Booked cases | 852 |

Maternal literacy

| | |
|---------------------------|-------|
| nil | 67.4% |
| <8 th std | 23.6% |
| 9 to 12 th std | 6.1% |
| >12 th std | 0.9% |

TABLE – 3

LATE FETAL DEATHS

| Cause of death | Total | Percentage % |
|------------------------|-------|--------------|
| Macerated still births | 166 | 46.8 |
| Birth asphyxia | 76 | 27.11 |
| Congenital anomalies | 36 | 10.16 |
| Prematurity | 62 | 17.5 |
| Others | 14 | 3.95 |

TABLE – 4

EARLY NEONATAL DEATH

| Cause of death | Total | Percentage % |
|-------------------------|-------|--------------|
| Perinatal hypoxia | 68 | 40.7 |
| Septicemia | 32 | 19.16 |
| Respiratory distress | 24 | 14.3 |
| Prematurity | 26 | 15.56 |
| Congenital anomalies | 8 | 4.7 |
| Others | | |
| Hypothermia (1) | | |
| Neonatal depression (3) | 9 | 5.38% |
| Unexplained (5) | | |

Out of 354 late fetal deaths, 166 were macerated babies. The most important cause perinatal death was perinatal hypoxia (LFD 27.11 END 40.7) Causes of intra partum asphyxia was APH, anemia, preeclampsia, prolonged labour and nuchal cord, congenital anomalies, prematurity, infection, respiratory distress contribute to increased PMR.

In present study 14.8% were unbooked cases (<3 antenatal visits) and 95% were belonging to low socioeconomic group. Maternal literacy rate was poor (nil 67.4%, <8th std 23.6%, 9 to 12th std 6.1%, >12 std 0.9%).

The following list summarises the occurrence of high risk pregnancies in the 1000 consecutive deliveries and the number of perinatal deaths in each category.

Most important and frequent occurrence among all high risk cases includes preeclampsia, anaemia, previous LSCS, and BOH. PMR increases in antepartum hemorrhage, eclampsia, twin gestation, and breech presentation, grand multipara and bad obstetric history.

TABLE – 5

| Risk factors | No.of babies | LFD | END | Total | PMR |
|---------------------|---------------------|------------|------------|--------------|------------|
| Anaemia (Hb<8gm) | 124 | 4 | 5 | 9 | 72.5 |
| Preeclampsia | 112 | 2 | 2 | 4 | 35.7 |
| PROM | 48 | 1 | - | 1 | 20.8 |
| RH negative | 36 | 1 | - | 1 | 27.7 |
| BOH | 34 | 3 | 1 | 4 | 117.6 |
| Breech | 26 | 2 | - | 2 | 76.9 |
| Twins | 16 | 4 | - | 4 | 250 |
| APH | 12 | 2 | 1 | 3 | 250 |
| Eclampsia | 2 | 1 | - | 1 | 500 |
| Prolonged pregnancy | 13 | 1 | 1 | 2 | 153.8 |
| Grand multi para | 4 | 1 | - | 1 | 250 |
| Elderly primi | 5 | - | - | - | - |
| Oligohydramnios | 9 | 1 | - | 1 | 111 |
| Hydramnios | 7 | - | - | - | - |
| Previous LSCS | 113 | 1 | - | 1 | 8.8 |
| Epilepsy | 3 | 1 | - | 1 | 333.3 |
| Asthma | 4 | - | - | - | - |
| Heart disease | 2 | - | - | - | - |
| Diabetes mellitus | 2 | - | - | - | - |
| Jaundice | 1 | - | - | - | - |
| No risk group | 435 | 2 | 1 | 3 | 6.9 |

TABLE – 6
PMR AND PARITY

| Gravida | No | LFD | END | Total | Perinatal mortality |
|----------------|-----------|------------|------------|--------------|----------------------------|
| Primi | 442 | 9 | 5 | 14 | 31.6 |
| II | 341 | 7 | 3 | 10 | 29.3 |
| III | 148 | 2 | 1 | 3 | 20.2 |
| IV | 42 | - | - | - | - |
| V | 8 | 1 | 1 | 2 | 250 |

PMR is higher with increasing in parity (more than 2 deliveries) primies have increased PMR comparatively, than second gravida (due to teenage and preeclampsia)

TABLE – 7
PMR AND AGE

| Age | Total no. of cases | LFD | END | Total | PMR |
|--------------|---------------------------|------------|------------|--------------|------------|
| <20 | 93 | 9 | 2 | 11 | 118.2 |
| 20-29 | 827 | 6 | 6 | 12 | 14.5 |
| 30 and above | 80 | 4 | 2 | 6 | 75 |

PMR is increased in extremes of reproductive age.

Table – 8
PMR AND ANTENATAL VISITS

| Division | No. of cases | LFD | END | Total | PMR |
|-----------------|---------------------|------------|------------|--------------|------------|
| Booked | 852 | 11 | 8 | 19 | 22.3 |
| Unbooked | 148 | 8 | 2 | 10 | 67.5 |

Careful and intensive antenatal care significantly influences the perinatal outcome. More perinatal deaths occur in patients not receiving adequate antenatal care.

TABLE – 9
MODE OF DELIVERY AND PMR

| Mode of delivery | No. of cases | LFD | END | Total | PMR |
|---------------------------------|---------------------|------------|------------|--------------|------------|
| Vaginal (cephalic) | 656 | 15 | 2 | 17 | 25.9 |
| Vaginal (breech) | 16 | 4 | 3 | 7 | 437.5 |
| Forceps delivery | 11 | - | 1 | 1 | 90 |
| Lower segment caesarean section | 317 | - | 4 | 4 | 12.6 |

Perinatal mortality rate was found to be high in assisted breech deliveries.

TABLE – 10
PERINATAL DEATHS IN RELATION TO LIQUOR COLOUR

(MECONIUM STAINED LIQUOR)

| MSAF | Total no. of cases | END | Percentage |
|-------------|---------------------------|------------|-------------------|
| Thin | 45 | 1 | 2.2 |
| Thick | 28 | 5 | 17.8 |

In thick meconium stained liquor comparatively increased perinatal deaths were observed.

TABLE – 11
PERINATAL DEATHS IN RELATION TO GESTATIONAL AGE

| Gestational Age | Total no. of cases | LFD | END | Total | PMR |
|------------------------|---------------------------|------------|------------|--------------|------------|
| Preterm | 126 | 14 | 6 | 20 | 158.7 |
| Term | 870 | 4 | 3 | 7 | 8 |
| Post term | 12 | 1 | 1 | 2 | 166.6 |

Among 1008 babies 12.5% were preterm babies and 1.2% were post term babies. The perinatal mortality among preterm babies were high (preterm birth contributed to 15% of total perinatal deaths)

TABLE – 12
PERINATAL DEATHS IN RELATION TO BIRTH WEIGHT

| Birth wt. | Total no. of cases | LFD | END | Total | PMR |
|------------------|---------------------------|------------|------------|--------------|------------|
| 1000 – 1499 | 20 | 4 | 2 | 6 | 300 |
| 1500 – 2499 | 176 | 9 | 7 | 16 | 90.9 |
| > 2500 | 812 | 6 | 1 | 7 | 8.6 |

L BW constitutes 20% of total births.

perinatal mortality decreases as the birth weight increases.

LBW constitutes 65% of total perinatal deaths.

TABLE – 13
APGAR SCORE AND PERINATAL DEATH

| APGAR (5min) | Total no.of cases | END | Percentage |
|---------------------|--------------------------|------------|-------------------|
| 0-3 | 34 | 7 | 20.5 |
| 4-6 | 57 | 3 | 5.2 |
| 7-9 | 917 | - | - |

Perinatal deaths more observed in babies with low APGAR score.

TABLE – 14
MATERNAL HIGH RISK FACTORS AND THEIR
RELATION WITH FETAL FACTORS

| S. No. | Risk factors | Total baby born | Preterm | | Term | Low birth wt | | >2.5 kg | APGAR | | | MS AF | | Peri-natal deaths |
|--------|----------------------------|-----------------|---------|------|------|--------------|------|---------|-------|----|-----|-------|------|-------------------|
| | | | | | | | | | | | | Thick | Thin | |
| 1. | PRE ECLAMPSIA (110) | 112 | 50 | 44.6 | 72 | 48 | 42.9 | 64 | 2 | 10 | 100 | 3 | 2 | 4 |
| 2. | ANAEMIA (122) | 124 | 28 | 22.5 | 96 | 38 | 30.6 | 86 | 3 | 2 | 119 | 4 | 3 | 9 |
| 3. | BAD OBSTETRIC HISTORY (34) | 34 | 8 | 23.5 | 26 | 12 | 35.3 | 22 | 2 | 8 | 24 | 6 | - | 4 |
| 4. | APH (12) | 12 | 4 | 33.3 | 8 | 6 | 50 | 6 | 3 | 1 | 8 | - | - | 3 |
| 5. | BREECH (26) | 26 | 12 | 46.2 | 14 | 16 | 61.5 | 10 | 6 | 6 | 14 | - | - | 2 |
| 6. | TWINS (8) | 16 | 10 | 62.5 | 6 | 12 | 75 | 4 | 4 | 6 | 6 | 3 | - | 4 |

Maternal high risk factors and their relation with fetal risk factors commonly occurring important maternal risk factors and their relation with fetal risk factors which cause increased perinatal mortality were analysed. There was overlap of causative factors like anemia with preeclampsia, bad obstetric history with anemia or preeclampsia, multiple pregnancies with above mentioned risk factors. Taking each risk factor to be singly associated with perinatal death, the perinatal mortality rates were formulated.

Preeclampsia

Among 110 cases, 2 were twins and preeclampsia associated with APH were found in 7 cases. The number of primies were 70(57%) LSCS done for 51 cases. LBW and preterm babies were twice than usual.

In preeclampsia abruptio placenta was found in 7.5% cases. Among abruptio placenta (12) preeclampsia was found in 4 cases (66.7%).

Anemia

Moderate and severe anaemic cases were analysed ($Hb < 8gms$). In 122 anemic cases 2 cases of twins were found. In parity, anaemia was found as a risk factor in 18% of II gravida, 40% of III gravida, 80% of IV and V gravida. We had 9 perinatal deaths in this group among which 5 were preterm (77.8) category.

BOH

We had 34 cases of BOH among which there were 4 deaths (perinatal mortality rate 117.6/1000 births) 35% of BOH mothers delivered low birth weight babies.

MULTIPLE PREGNANCY

Among 16 twins, pre eclampsia found in 2 cases anaemia found in 2 cases and preterm babies were 3 times more common. 75% of babies were low birth weight babies.

MALPRESENTATION

Breeches were more common. Among 26 cases 16 cases were conducted as vaginal and lscs done for 10 cases. In assisted breech deliveries, perinatal death was 7 (PMR 437.5/1000 births) and the breech delivery was associated with poor apgar scores.

Commonest congenital malformations found in our study were multiple congenital anomalies, hydrocephalus, anencephaly, exomphalos, gastroschisis, cleft lip, cleft palate, phocomelia and congenital diaphragmatic hernia etc.

DISCUSSION

Perinatal mortality is one of the most sensitive indices of maternal and child health. The perinatal mortality rate is an indicator of the extent of pregnancy wastage as well as of the quality and quantity of health care available to the mother and the new born. Socio economic factors, nutritional status of the mothers and the standard of life were important risk factors responsible for the perinatal loss. Apart from the above mentioned factors, the pathological conditions in pregnancy like anaemia, preeclampsia, APH, BOH, twins and malpresentation were important risk factors for perinatal death.

PMR continues to be high in India despite various measures taken to reduce the same when compared to other developed countries.

| | |
|-------------------------|------|
| (lopez etal, 1990) PMR | 2000 |
| Developed countries 18 | 16 |
| Developing countries 62 | 56 |

In India PMR is about 45, but varies from place to place and it depends upon literacy rate, standard of living, availability of improved obstetric and perinatal care and technologies.

PMR of 31.75 per thousand births in present study is in conformity with other Indian hospital based study (38.5 to 86.8 per thousand births), but higher than the western figures 10-20/1000 births.

In Southern India,

| Year | Name | PMR |
|-------------|------------------------|------------|
| 1971 | Menon et al., | 78.1 |
| 1976 | Rao et al., | 77.4 |
| 1985 | Santhakrishnan et al., | 89.5 |
| 2000 | Bhat et al., | 53.4 |
| 2005 | Present study | 31.75 |

In our institution over the last 15 years, the PMR had declined from 67.5 in 1985, to 58 in 1995, to 53.4 in 2000, to 31.75 at present study (2005).

Perinatal hypoxia was the major cause of PMR, especially in the early neonatal deaths (END).

| S. No. | Name | Birth asphyxia | Congenital anomaly | Infection | Pre-maturity |
|---------------|--------------------------|-----------------------|---------------------------|------------------|---------------------|
| 1. | Santhanakrishnan et al., | 44.3% | 6.6% | 34.4% | 9.6% |
| 2. | Verma et al., | 32.1% | 12.9% | 14.4% | 15.5% |
| 3. | Rk kapoor et al., | 43% | 15% | 16% | 14% |
| 4. | Lalitha behl et al., | 31.3% | 4.9% | 28.5% | 15.3% |
| 5. | Present study | 40.7% | 4.7% | 19.16% | 15.56% |

Perinatal infection is a preventable cause of perinatal death. The commonest organisms isolated were E.coli and Klebsiella. Deaths due to hyaline membrane disease (HMD) were 17% of total perinatal deaths.

Most of the perinatal deaths occur in preterms and low birth weight babies. The important causes of death in preterm babies were perinatal hypoxia, HMD, infections, intraventricular and pulmonary haemorrhage.

PMR is inversely proportionate with birth weight and gestational age.

| STUDY | PRETERM | LBW |
|---------------------------|----------------|------------|
| Pradeep et al., | 84% | 83% |
| S.K. Kapoor et al., | 54.2% | 76.4% |
| Meena et al., | 64.7% | 64.7% |
| Bhavasara & Shrotri et al | 74% | - |
| Agarwal et al | 56.4% | - |
| Malik & Mir et al | 56.2% | 66.2% |
| Present Study | 68.9% | 75.86% |

Maternal risk factors affecting perinatal outcome were given in the table 2 and 5, the relative high PMR in present study was accounted by the fact that most mothers had one or more high risk mortality were not truly representative of the community because this data often pertaining to the selective population of high risk mothers.

We had PMR of 22.3 in booked cases and 67.5 in unbooked cases. This is also studied by Shinde M Verma (1993).

Highest perinatal mortality was recorded in para 5 and above (PMR 250/1000 births). This is compatible with findings of A.Shinde et al., Santhanakrishnan and S.Gopal et al.

Anemia

In anemia preterm babies were found in 22.5% low birth weight babies were found in 30.6%. In the present study 96.5% patients belong to low-socioeconomic group and 14.8% of patients were unbooked cases.

S.K.Kapoor et al 6% of perinatal deaths were lbw babies

Metha & Jayanth 29%

A Shinde et al 2.29%

Present Study 22.5%

Preeclampsia

In present study, 11.2% of pregnant mothers had preeclampsia. In total perinatal mortality preeclampsia contribute to 15.5% and eclampsia 1.3% respectively. Preterm babies in preeclampsia pts was 44.6% and 42.9% of babies were low birth weight babies.

| | |
|------------------|-------|
| S.K.Kapoor et al | 8.3% |
| Rasul et al | 33% |
| Present Study | 15.5% |

APH

In present study, APH was found in 1.2% of all pregnant women (PMR 250/1000 births) in total perinatal deaths APH corresponds to 11.7% in the present study, higher perinatal mortality in the abruptio group was due to higher incidence of intra uterine deaths at the time of admission. It was also noted 33.3% were preterm babies and 50% were LBW babies.

BOH

The occurrence of BOH among perinatal deaths

| | |
|--------|-----------------------|
| 12.47% | TH Rasul |
| 22.54% | Shalini Chandrasekhar |
| 7.4% | Present Study |

Multiple Pregnancies

In the present study, we had 146 pts (143 were twins, 3 triplets) multiple pregnancy contributed to 4% of perinatal deaths.

Hawrylyshegn et al, 132/1000 births

In Present Study 250/1000 births

SUMMARY

- 521 perinatal deaths occurred out of 12864 deliveries.
- Overall PMR is 31.75/1000 births.
- Late fetal death contributed to 67.9%.
- Early neonatal death 32%.
- Lowest perinatal deaths were found in the age group of 20-29 yrs.
- The PMR of unbooked cases were found to be nearly twice that of booked cases.
- The commonest maternal risk factors found in our study were as follows:

| | |
|----------------|-------|
| Anaemia | 24% |
| Preeclampsia | 15.5% |
| BOH | 7.4% |
| APH | 11.7% |
| Malpresentaion | 9.7% |
- If Hb <8gms, there was significant increase in PMR.

- In APH - the abruptio group was found to be responsible for increase in PMR.
- In breech presentations, increased perinatal deaths were observed in assisted breech deliveries.
- PMR increased in multiple pregnancies (secondary to prematurity and LBW).
- The most important preventable cause of perinatal death observed in our study was obstructed labour (due to late referral from periphery).
- Causes of increased PMR were
 1. Perinatal asphyxia
 2. Infections
 3. Respiratory distress
- Among late fetal deaths 46.8% were macerated still births.

CONCLUSION

The present study has highlighted the relationship of perinatal mortality specific biological factors such as age of mother, parity, prematurity and Birth Weight etc.

The following conclusions were drawn after analyzing 12864 deliveries in our Hospital with particular reference to perinatal mortality.

Majority of the causes, like low birth weight, Anemia, Preeclampsia, B.O.H. and multiple pregnancies can be treated by proper adequate Antenatal care which includes, nutritional support, weight monitoring, immunisation, iron, and folic acid supplementation, early identification of warning signals and timely interventions.

Intra partum monitoring is very essential in High risk cases to reduce wastage caused by asphyxia. Maintenance of strict adequate asepsis in Labour ward, operation theatre and neonatal nurseries are essential to reduce perinatal Infections.

Specially designed neonatal care units and neonatologists should devote their efforts to improve the management of prematurity, perinatal infections and asphyxia before embarking on purchase of expensive monitoring devices and ventilatory equipments.

Socio-economic and other non obstetric background factors are the most important determinants for P.M.R. and also morbidity but the change in these factors can only be a longterm process which may need generation. Health care delivery system in the field or institutions can identify such vulnerable individuals and plan special management for such group to achieve overall improvement in pregnancy outcome. Risk strategy, thus facilitate more efficient use of scarce resources to provide better attention to those who need it most.

In conclusion, the risk approach to maternal and child health is particularly useful in the developing countries with limited resources, so as to provide appropriate care to those who deserve it most. Simplified scoring system with high degree of sensitivity to identify high risk pregnancies should be taught to MCH field staff in the screening and correct referral of mothers and neonates, so as to reduce morbidity and mortality of the both. By early identifications of the risk factors in the field and with a proper referral system utilising the existing referral chain, those who need maximum attention, skills, and facilities may be referred well in time to the regional or teaching hospitals.

Health education, training of dais and auxiliary nursing midwives in immunisation, family planning and provision of transport services for MCH care are essential pre-requisites in the proper identification of high risk cases,

to improve the outcome in risk cases and to improve the standards of life.

Education of the consumer i.e. future mothers is also necessary and the needs to be emphasized for better utilisation of available services.

BIBLIOGRAPHY

- 1) Agarwal VK Gupta SC, Roy Choudary : Observation on Perinatal mortality ;India Pediatr 1982, 19 : 233-238.
- 2) Abraham S, Joshi, S., Kumar, V. *et al*, 1991. Indian experience of Home Based Mothers Card (ICMR Taskforce Report). Indian J. Pediatrics 58: 795-804.
- 3) Baird, D. 1985. Changing problems and priorities in obstetrics. Br. J. Obst. Gynaecol. 92: 115-121.
- 4) Bhatia BD, Mathur, NB, Chaturvedi P, Dubey AP, Neonatal mortality pattern in rural based Medical College Hospital, Indian J Pediatr 1984, 51 : 309-312.
- 5) Charurvedi P, Potadr S. Changes in neonatal care pattern and neonatal mortality in a rural medical college, Indian Ped 25, 171-178.
- 6) Editorial, 1986. Perinatal care - Organisation and outcome Lancet. 777-778.
- 7) Garg VK, Singh Neonatal mortality rate - A Hospital study Indian Pediatr 1987; 24; 639-643.
- 8) Grant, 1991. The State of the World's Children. 1991. UNICEF, New York.
- 9) Hey EN Lloyd DJ, Wigglesworth J.S. 1986 Classification of perinatal deaths, Fetal and neonatal Br.J.Obs & Gynae 93: 1213-1223.
- 10) ICD. International Classification of Diseases etc. 10th Revision, WHO

Geneva.

- 11) Kirkup, N. 1991. Perinatal audit: Does confidential enquiry have a place: Br.J. Obstet. Gynaecol. 97:371-373.
- 12) Leveno, K.J., Cunningham, F.G., Nelson, S. *et al.*, 1986. 'A prospective comparison of selective and universal EFM. New Eng. J. Med.315: 615-619.
- 13) Lalita Behl, Nee KM, Grover - Perinatal mortality A Hospital based study volume 35, July 1998 683-684.
- 14) Kameswaran C, Bhatia, BD Bhat by perinatal mortality, A hospital based study. Indian pediater 1993, 30 : 997-1001.
- 15) Jadhav M, Christopher L.G. Perinatal Mortality in Vellore - Part I A study of 21, 585 Infants Indian J Pediatr 1986, 53: 347-352.
- 16) Joshi AR, Daga SR, Daga AS. Perinatal Audit thorough Wigglesworth classification Indian pediatr 1988, 25: 525-529.
- 17) Kapoor R.K, A.K.Srivastava, PK Misra - Perinatal mortality in Urban slums in Lucknow.
- 18) Karan S, Mathur BP, Surainder YA, Incidence and causes of perinatal mortality at the Institute of Child health, Hyderabad - Indian pediatr 1972, 9 : 99-106.
- 19) Gupta PK, Gupta AP. Perinatal mortality Indian Pediatr 1985, 22: 201- 205.
- 20) Kumar MR. Bhat BV, Oumachigui A Perinatal mortality trends in

referral hospital. Indian J Pediatr 1996, 63: 357-61.

- 21) SK Kapoor, K.Anand and Suresh Kumar. Risk factors for still births in a secondary level hospital at Ballabgrah, Haryana : A case control study Indian J Pediatr 1994, 61, 161-166.
- 22) Mangala A. Shinde. The study of perinatal mortality in a rural area. J. of Obst & Gyn of Indian Vol 51, No.2 March / April 2001.
- 23) Meena J.Jotwani, Sindha B Bhute, Kamal K.Deshmukh. Evaluation of perinatal mortality in preterm labour.
- 24) Jani KK Mayastood Neera Gupta. Early neonatal morbidity and mortality in at risk and normal term pregnancy Indian J Pediatric 1997-64, 523-527.
- 25) Jyotana Ashok Kutcde, Nagnath kumarappa study of outcome of management of premature babies. J of obts Gyn. of Indian Vol.51 No.2, March/April 2001.
- 26) Kamal Sikdar, BN Gupta, Kamala Kundu. Comparative study of perinatal outcome in different mal presentation Ind Job & Gynae.
- 27) N.Bhardwarj SB Hasan M Zaheer Maternal care receptivity and its relation to perinatal and neonatal mortality a rural study. Indian pediatrics Volume 32 April 1995.
- 28) DV Mavalankar, CC Trivedi, Maternal weight, height and risk of poor pregnancy outcome Indian pediatrics volume 31, October 1994, 1205-1211.

- 29) P.K.Misra, N.Srivastava, G.K.Malik, Outcome in relation to APGAR score in term neonate Indian Pediatric volume 31, 1994, 1215-1218.
- 30) S.S.Rathan K.Bhasker Rao, S.Arul Kumaran - Perinatal mortality II and morbidity Obstetrics and Gynaecology, 252-259, Volume I 8-13.
- 31) Park K. Text book of preventive and social medicine, 383-385.
- 32) CEDSDI 1993 (Annual Report for 1993)
- 33) John Studd - Progress in Obst & Gynae volume 12, 193-205.
- 34) Robert M Kliegman The fetus in the neonatal Infant - Text book of pediatrics - Nelson.
- 35) A.L. Mudaliar & Menons - Text Book of obstetrics.
- 36) Pradeep M. Raj an Sudevan P Perinatal mortality - A Hospital based study Indian Pediatrics 1995,32.
- 37) Patel S, Vani SN, Jani P. Trends in perinatal and neonatal mortality and morbidity (A Hospital Based study). Paper presented at XVII Annual. Convention of National Neonatal Forum, Vellore.
- 38) Puri RK, Verma JC, Choudry P et al., Perinatal mortality - Incidence and effect of various maternal factors PAI Indian J Ped. 1981, 49 : 297-302.
- 39) Raksha Arora, Uma Devi Perinatal mortality in APH J of Obstetrics Vol.51 No.3, May 102-1021.
- 40) Shayam Kaushik, Neelam Groyr VR Parmer Neonatal morbidity in a Hospital at Shimla Indian J Pedict 1999 66 to 19.

- 41) Parmar V, Grover N, Randhwai, Behl I Perinatal mortality in Shimla
Indian Pediatr 1994-31, 833-836.
- 42) Swathi Pandey, Anupama Dave Maternal and Foetal outcome in cases
of PROM. Journal of Obs and Gynaecology of India.
- 43) Shalini Chandrasekar, RS Phaneendra Rao Perinatal Mortality in a rural
district of South India.
- 44) Santhakrishnan BR, Gopal S, Jaya MS Perinatal mortality in referral
teaching hospital in Madras City India J.Ped 1986-53, 359-363.
- 45) Singh M Hospital based data on perinatal and neonatal mortality in
India. Indian Pediatrics 1986, 23 : 579-584.
- 46) Singh M. Deorari AK, Khajuria RC. Perinatal and neonatal mortality
in a hospital. India J Med Res 1991-94 (B) 1-5.
- 47) Verma, J Chhatwal Perinatal mortality at a tertiary care. Hospital in
Punjab Indian J Pediatr 1999 ; 66 : 493-497.
- 48) Wigglesworth JS Monitoring perinatal mortality - A
pathophysiological approach Lancet 1980, 2 : 684-86.
- 49) Utpal Kant Singh, SP.Srivastava, Anjanikumar : Comparative study of
perinatal mortality and morbidity in the community and at Medical
College Hospital Patna Volume 33 Dece 1996 Indian pediatr.
- 50) Gopalan S 1982 Doctoral thesis on scoring system for identification of
high risk pregnancies. Chandigarh.
- 51) ICMR 1988 Home based study ICMR New Delhi.

- 52) WHO 1985 Prototype Home based mother's record reference manual
etc MCH 185 13, WHO Geneva.
- 53) Williams - Text Book of Obstetrics 21st Edition.
- 54) O.P.Ghai MD - Essential Pediatrics - Text Book of Pediatrics
- 55) Dewhurst's Text Book of Obstetrics and Gynecology for Post
Graduates 6th Edition.
- 56) Ian Donald - Practical Obstetrics problems.

PRETERM BABY**MENINGO MYELOCOELE**

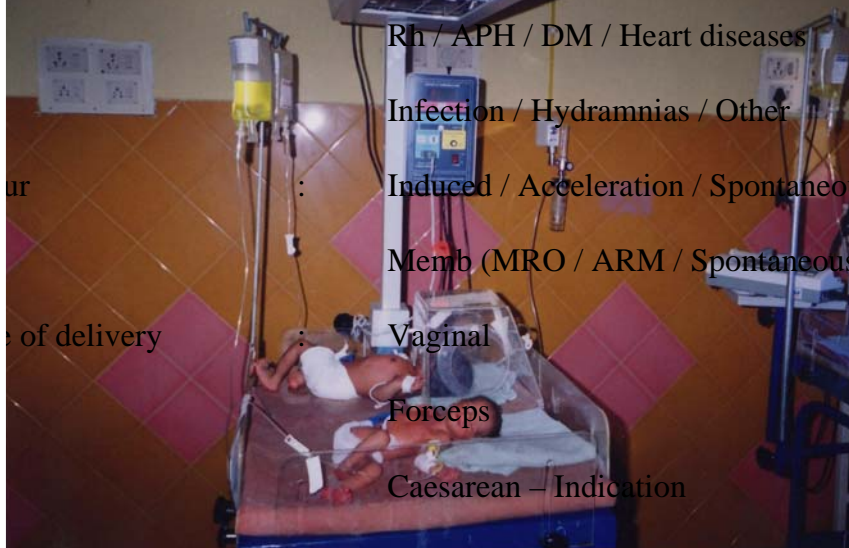
NEW BORN UNIT IN GOVT. R.S.R.M. LYING-IN HOSPITAL

PROFORMA

PERINATAL MORTALITY

| | | | |
|----------------------|------------------------|---------------------|-----------|
| Name : | Age : | IP No. : | Address : |
| Date of Admission. : | Occupation : | | |
| Date of Delivery : | Socioeconomic Status : | | |
| Date of Discharge : | Booked / Unbooked : | | |
| Gravida | Para | No. of the children | Abortion |
| LMP | Gest. Age | LCB | |
| EDD | | | |

Maternal Complications 151



Lur : Induced / Acceleration / Spontaneous
 M of delivery : Vaginal
 Caesarean – Indication

Thin } Amnio infusion

| | | | |
|-----------------------------|---|--------------------------|-------|
| | | Moderate thick | |
| | | Blood stained | |
| Placenta | : | Any abnormalities | |
| Umbilical Cord | : | | |
| Baby | : | Sex | |
| | | Apgar | 1" 5" |
| | | Weight | |
| | | Term/ Preterm / Postterm | |
| | | AGA / SGA / LGA | |
| New born Unit (NICU) - ADMN | | DOA | |
| | | DOD | |
| | | Diagnosis | |
| | | Treatment | |
| Dead Born | : | Still born / macerated | |
| Neonatal death | : | Age | |
| | | Date | |
| | | Days | |
| | | Trimester | |
| | | Cause | |

EARLY NEONATAL DEATH

| SLN o. | IP No. | Age | Parity | DOD | MOD | Sex | BW (Kg) | Apgar (10) | GA (wks) | Alive Duration | Cause of Death | Maternal Factors |
|--------|--------|-----|--------|------------|------|--------------|---------|------------|----------|----------------|-----------------------|------------------|
| 1 | 3485 | 20 | G2P1L1 | 20/03/2006 | LN | Female | 1.25 | 3 | 32 | 1 day | ?RDS HMD | - |
| 2 | 3070 | 19 | Primi | 1/3/2006 | LSCS | Female | 3.3 | 3 | Term | 5 hrs | Birthasphyxia | - |
| 3 | 3534 | 19 | Primi | 22/03/2006 | LN | Female | 3.1 | 4 | Term | 1 day | HIE Birthasphyxia | - |
| 4 | 3699 | 21 | Primi | 23/03/2006 | LN | Female | 1.75 | 4 | 36 | 1 day | Tonic seizures | PROM |
| 5 | 3472 | 23 | G3P2L2 | 23/03/2006 | LN | Female | 2.25 | 6 | Term | 2 days | MSAF MAS | ANAEMIA |
| 6 | 3798 | 18 | Primi | 26/03/2006 | LN | Female | 2.5 | 3 | Term | 1 day | Birthasphyxia | - |
| 7 | 3886 | 18 | Primi | 28/03/2006 | LN | Female | 1.2 | 4 | 30 | 1 day | Apnoea HMD | Jaundice |
| 8 | 2187 | 20 | G2P2L1 | 25/02/2006 | LN | Female | 1.7 | 0 | 32 | Still born | Meningomyocoele | - |
| 9 | 3516 | 19 | Primi | 21/03/2006 | LN | Ambignous(F) | 2 | 3 | 32 | 4 hrs | Cong anomaly RDS | - |
| 10 | 3472 | 22 | G3P2L2 | 23/03/2006 | LN | Female | 2.25 | 4 | Term | 2 days | IUGR/MSAF | ANAEMIA |
| 11 | 3400 | 19 | Primi | 11/3/2006 | LN | Male | 2.75 | 6 | Term | 3 days | Septicemia | Postdatism |
| 12 | 3570 | 19 | Primi | 21/03/2006 | LSCS | Female | 3.3 | 3 | Term | 6 HRS | Severe birth asphyxia | Cord prolapse |
| 13 | 3058 | 20 | Primi | 9/3/2006 | LSCS | Male | 3 | 2 | Term | 4 days | Neonatal depression | - |
| 14 | 2939 | 21 | G2P1L1 | 10/3/2006 | LN | Male | 2.2 | 4 | Term | 1 day | MAS | - |
| 15 | 2352 | 20 | Primi | 8/3/2006 | LSCS | Female | 2 | 3 | Term | 2 days | Neonatal depression | - |
| 16 | 2731 | 21 | G2P1L1 | 5/3/2006 | LN | Male | 2.2 | 4 | Term | 5 days | Neonatal depression | - |
| 17 | 2669 | 20 | Primi | 2/3/2006 | LN | Female | 2.2 | 3 | Preterm | 6 hrs | HIE | - |
| 18 | 2711 | 21 | Primi | 2/3/2006 | LSCS | Male | 2 | 5 | Term | 4 days | Phocomelia | - |
| 19 | 2580 | 20 | Primi | 10/3/2006 | LN | Male | 2 | 3 | Term | 4 days | MAS/SGA | - |
| 20 | 1720 | 24 | Primi | 28/02/2006 | LN | Female | 1.95 | 4 | Preterm | 2 days | RDS | PROM |
| 21 | 2349 | 22 | Primi | 23/02/2006 | LSCS | Male | 2.3 | 4 | Preterm | 1 day | RDS | Postdatism |
| 22 | 2402 | 20 | Primi | 22/02/2006 | LN | Female | 1.7 | 3 | Preterm | 1 day | ?cong Heart disease | - |
| 23 | 2300 | 20 | Primi | 22/02/2006 | LN | Male | 1.6 | 2 | Term | 2 days | IUGR Seizure | Heart disease |
| 24 | 1975 | 21 | Primi | 20/02/2006 | LSCS | Male | 2.5 | 2 | Term | 3 days | convulsion | - |
| 25 | 2428 | 36 | Primi | 24/02/2006 | LN | Female | 2.5 | 4 | Term | 5 days | Down's Syndrome | - |
| 26 | 2288 | 24 | Primi | 22/02/2006 | LN | Male | 1 | 3 | Preterm | 1 day | RDS | PROM |
| 27 | 1809 | 25 | Primi | 9/2/2006 | LN | Male | 1.5 | 4 | Preterm | 2 days | Apnoea | |

| SL.N o. | IP No. | Age | Parity | DOD | MOD | Sex | BW (Kg) | Apgar (10) | GA (wks) | Alive Duration | Cause of Death | Maternal Factors |
|---------|--------|-----|--------|------------|-----------|--------|---------|------------|----------|----------------|-------------------------|------------------|
| 28 | 1999 | 28 | G2P1L1 | 14/02/2006 | LN | Male | 1.5 | 3 | Preterm | 3 days | Early onset sepsis | - |
| 29 | 1465 | 29 | Primi | 4/2/2006 | LN | Female | 3.25 | 6 | Term | 13 days | cong hyperinsulinism | - |
| 30 | 1796 | 31 | G3P2L1 | 13/02/2006 | LN | Male | 3 | 3 | Term | 4 days | Severe birth asphyxia | - |
| 31 | 1764 | 30 | G3P2L1 | 10/2/2006 | LN | Male | 2.5 | 4 | Term | 1 day | Cows Milk Aspiration | - |
| 32 | 225 | 19 | Primi | 6/1/2006 | LN | Male | 1 | 3 | Preterm | 9 hrs | LBW RDS | - |
| 33 | 3874 | 21 | Primi | 27/03/2006 | LN | Female | 1.6 | 2 | Preterm | 2 hrs | RDS | - |
| 34 | 3923 | 22 | G2P1L1 | 29/03/2006 | LN | Male | 2.25 | 3 | Term | 1 day | HIE | - |
| 35 | 1189 | 26 | G3P2L2 | 29/01/2006 | LN | Female | 1.2 | 2 | Preterm | 3 days | RDS-Apnoea | - |
| 36 | 966 | 24 | Primi | 29/01/2006 | LN | Female | 1.1 | 2 | Preterm | 1 day | RDS/Sepsis | PROM |
| 37 | 1177 | 25 | G2P1L1 | 28/01/2006 | LN | Male | 1 | 2 | Preterm | 6 hrs | Apnoea | - |
| 38 | 500 | 27 | G3P2L1 | 13/01/2006 | LN | Male | 1 | 2 | Preterm | 2 hrs | RDS | Anaemia |
| 39 | 812 | 26 | Primi | 20/01/2006 | LN | Male | 1.25 | 3 | Preterm | 6 hrs | Apnoea | - |
| 40 | 703 | 21 | G2P2L1 | 18/01/2006 | LN | Female | 1.35 | 2 | Preterm | 1 day | RDS | - |
| 41 | 367 | 28 | G2P1L1 | 9/1/2006 | LN | Female | 2 | 4 | Term | 1 day | Osteogenesis imperfecta | - |
| 42 | 1410 | 26 | Primi | 4/2/2006 | LN | Female | 1.8 | 3 | Term | 1 day | Multiple anomalies | - |
| 43 | 1499 | 23 | Primi | 4/2/2006 | LN | Male | 1.3 | 2 | Preterm | 1 day | Birthasphyxia | - |
| 44 | 19404 | 25 | Primi | 2/12/2005 | LN | Male | 1.1 | 2 | Preterm | 1 day | BA | - |
| 45 | 19800 | 19 | Primi | 2/12/2005 | LN | Female | 1.25 | 6 | Preterm | 3 days | Sepsis | - |
| 46 | 19985 | 30 | G3P2L2 | 4/12/2005 | LN | Female | 2.25 | 8 | Term | 16 hrs | Multiple anomalies | Anemia |
| 47 | 20272 | 20 | G2P1L1 | 10/12/2005 | LN | Female | 1.3 | 3 | Preterm | 9 hrs | BA | - |
| 48 | 20607 | 21 | G2P1L1 | 16/12/2005 | LSCS | Male | 1.4 | 3 | Preterm | 12 hrs | RDS | APH |
| 49 | 20188 | 26 | Primi | 2/12/2005 | LN | Female | 3.5 | 1 | Term | 3 days | Birthasphyxia | - |
| 50 | 20107 | 23 | G3P1L1 | 21/12/2005 | LN | Female | 2.4 | 4 | Term | 6 hrs | Cong anomaly | BOH |
| 51 | 20957 | 24 | G2P1L1 | 22/12/2005 | LN | Female | 3.6 | 5 | Term | 6 hrs | Sepsis | IP Sepsis |
| 52 | 20109 | 30 | Primi | 24/10/2005 | LN | Male | 1.1 | 2 | Preterm | 10 hrs | RDS | - |
| 53 | 21126 | 21 | G2P1L1 | 26/12/2005 | A. Breech | Male | 2.9 | 2 | Term | - | BA | - |
| 54 | 21041 | 32 | G2P1L1 | 28/12/2005 | A. Breech | Male | 1.5 | 1 | Preterm | 30 Min | BA | - |
| 55 | 21024 | 20 | G3P1A1 | 3/11/2005 | LSCS | Male | 2.4 | 8 | Term | 6 HRS | MAS | Post Dated |
| 56 | 265 | 20 | G2A1 | 5/1/2006 | LN | Male | 2 | 8 | Term | 3 Hrs | Neonatal depression | - |

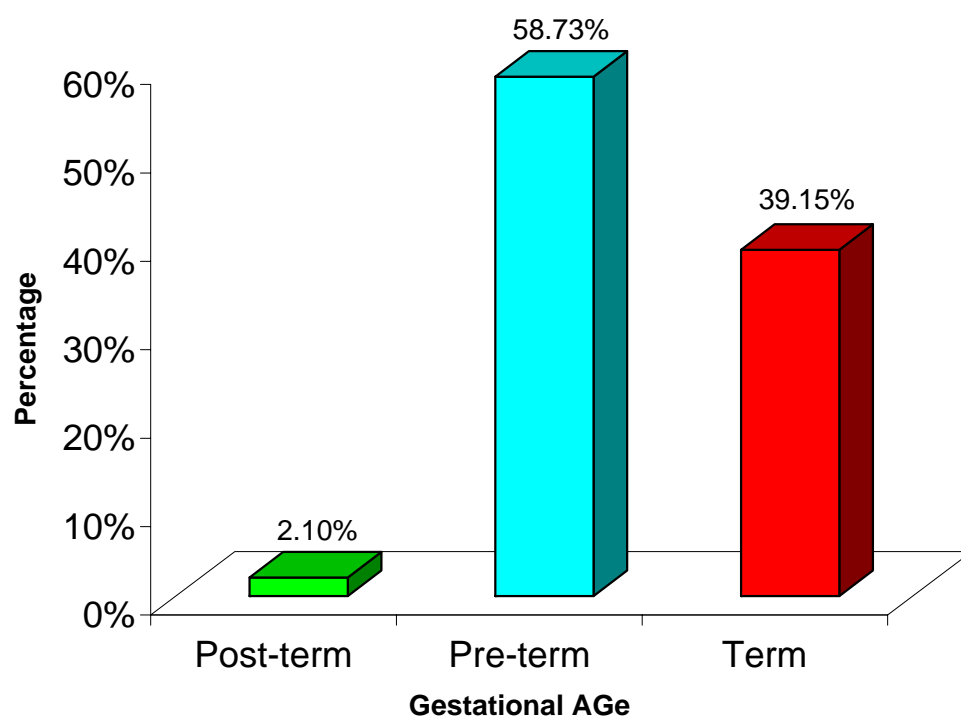
| SLN o. | IP No. | Age | Parity | DOD | MOD | Sex | BW (Kg) | Apgar (10) | GA (wks) | Alive Duration | Cause of Death | Maternal Factors |
|--------|--------|-----|----------|-----------|-----------|--------|---------|------------|----------|----------------|---------------------|---------------------|
| 57 | 320 | 21 | Primi | 6/1/2006 | LN | Male | 1.3 | 4 | Preterm | 18 Hrs | RDS | Hydramnios |
| 58 | 683 | 20 | Primi | 14/1/2006 | LN | Male | 2.5 | 6 | Term | 3 Hrs | BA | |
| 59 | 793 | 21 | Primi | 16/1/2006 | LSCS | Female | 2.35 | 3 | Preterm | 13 Hrs | RDS | Transverse lie |
| 60 | 1031 | 26 | G4P3L1 | 28/1/2006 | LSCS | Male | 1.8 | 3 | Preterm | 9 hrs | Sepsis | BOH |
| 61 | 1138 | 25 | G2P1L1 | 22/1/2006 | LN | Male | 1.1 | 1 | Preterm | 6Hrs | Prematurity | - |
| 62 | 1186 | 23 | G2P1L0 | 24/1/2006 | LN | Male | 1.1 | 4 | Preterm | 1Hrs | BA | - |
| 63 | 5213 | 24 | Primi | 1/4/2005 | LN | Male | 2 | 7 | Preterm | 2Hrs | APH | - |
| 64 | 4347 | 32 | G4P2L2 | 1/4/2005 | LSCS | Male | 3 | 8 | Posttem | 3days | ?APH | |
| 65 | 5551 | 25 | G2P1L1 | 3/4/2005 | LN | Female | 2.2 | 8 | Term | 1day | BA | |
| 66 | 5481 | 24 | Primi | 1/4/2005 | LSCS | Female | 2.5 | 2 | Term | 20Hrs | HIE-BA | OBS Labour |
| 67 | 5742 | 27 | Primi | 8/4/2005 | LN | Male | 1.9 | 3 | Preterm | 13Hrs | Prematurity | |
| 68 | 5801 | 23 | G2P1L1 | 6/4/2005 | LSCS | Male | 2.4 | 8 | Preterm | 2days | MAS | Prolonged Pregnancy |
| 69 | 5555 | 19 | Primi | 8/4/2005 | LN | Male | 1.5 | 8 | Preterm | 3days | Infection | - |
| 70 | 6144 | 26 | Primi | 11/4/2005 | LSCS | Male | 2.5 | 3 | Term | 3days | MAS | - |
| 71 | 7844 | 21 | Primi | 11/5/2005 | LN | Male | 1.5 | 4 | Preterm | 1day | Sepsis | Pretem Labour |
| 72 | 8074 | 18 | Primi | 13/5/2005 | LSCS | Female | 2.6 | 6 | Term | 3days | BA/MAS | OBS Labour |
| 73 | 8083 | 32 | G3P1L1A1 | 14/5/2005 | LN | Male | 2.2 | 8 | Term | 9Hrs | Neonatal depression | - |
| 74 | 7642 | 30 | G2P2L2 | 16/5/2005 | LN | Male | 2.8 | 3 | Preterm | 30Min | BA | - |
| 75 | 7970 | 28 | G3P2L2 | 12/5/2005 | LN | Female | 1.1 | 4 | Term | 7Hrs | BA | - |
| 76 | 8135 | 19 | Primi | 18/5/2005 | LN | Male | 1.9 | 7 | Preterm | 3Hrs | Sepsis | - |
| 77 | 8197 | 29 | G3P2L2 | 27/5/2005 | A. Breech | Male | 1.1 | 2 | Preterm | 6Hrs | RDS | - |
| 78 | 8461 | 22 | G3A1 | 19/5/2005 | LN | Female | 1.5 | 2 | Preterm | 1day | RDS | Rh-Negative |
| 79 | 8309 | 31 | G3P2L2 | 23/5/2005 | LN | Male | 2.4 | 5 | Term | 1day | MAS | - |
| 80 | 8885 | 23 | G2P1L1 | 3/5/2005 | LN | Male | 1.9 | 2 | Term | 2Hrs | RDS | - |
| 81 | 9643 | 21 | G2P1L1 | 8/6/2005 | LN | Male | 1.8 | 2 | Preterm | 2Hrs | RDS | - |
| 82 | 9474 | 21 | G2P1L1 | 7/6/2005 | LN | Female | 1.1 | 2 | Preterm | 1day | Prematurity | _____ |
| 83 | 9868 | 26 | G2A1 | 10/6/2005 | LN | Female | 3 | 1 | Term | 3days | BA | - |
| 84 | 9901 | 29 | G3P2L2 | 10/6/2005 | LN | Female | 1.6 | 1 | PT | 8Hrs | RDS | - |
| 85 | 9985 | 23 | G2P1L1 | 10/6/2005 | LN | Male | 2.3 | 8 | Term | 6days | Sepsis | MRO>12hrs |

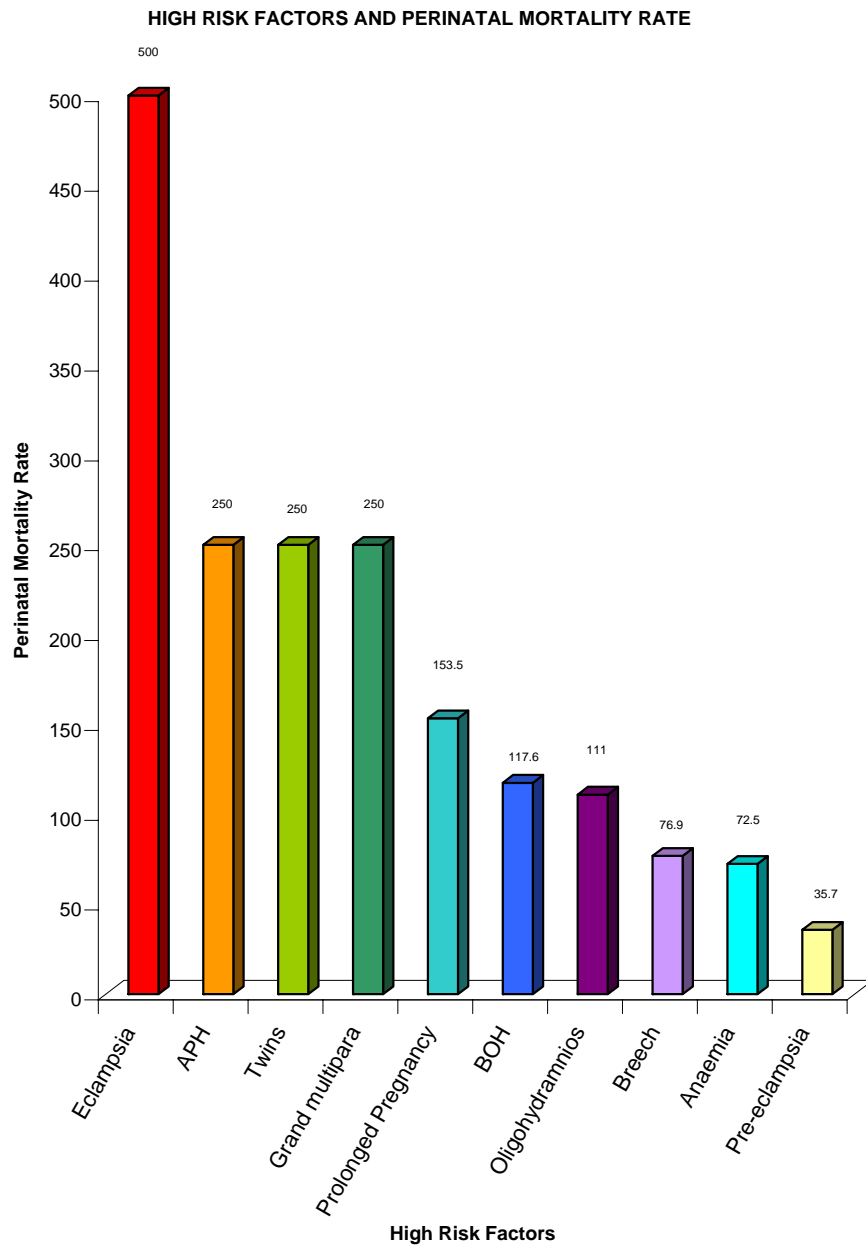
| SL.N o. | IP No. | Age | Parity | DOD | MOD | Sex | BW (Kg) | Apgar (10) | GA (wks) | Alive Duration | Cause of Death | Maternal Factors |
|---------|--------|-----|----------|------------|-----------|--------|---------|------------|----------|----------------|---------------------|------------------|
| 86 | 9751 | 26 | G2P1L1 | 13/6/2005 | LN | Male | 2.5 | 3 | Term | 6days | MAS | - |
| 87 | 10127 | 30 | G3P2L2 | 15/6/2005 | LN | Male | 1.2 | 3 | PT | 1day | RDS | - |
| 88 | 10274 | 20 | G2P1L1 | 16/6/2005 | LN | Male | 1.5 | 1 | PT | 1Hrs | Prematurity | Hydramnios |
| 89 | 10312 | 22 | G2P1L1 | 16/6/2005 | LN | Male | 1.5 | 2 | PT | 1day | RDS | - |
| 90 | 10698 | 26 | G2A1 | 22/06/2005 | LSCS | Female | 2 | 3 | PT | 6days | Sepsis | I.P.Sepsis |
| 91 | 10775 | 20 | Primi | 24/06/2005 | LN | Female | 1.9 | 3 | PT | 6Hrs | RDS | - |
| 92 | 10747 | 18 | G2P2L1 | 23/06/2005 | LSCS | Female | 2.25 | 4 | Term | 8days | MAS | - |
| 93 | 10750 | 18 | Primi | 24/06/2005 | A. Breech | Female | 1.2 | 3 | PT | 4days | Infection | Preterm Labour |
| 94 | 10950 | 25 | Primi | 26/06/2005 | LN | Female | 1.25 | 1 | PT | 30 min | Neonatal depression | Eclampsia |
| 95 | 10954 | 23 | G2P2L1 | 26/06/2005 | LN | Female | 1.5 | 4 | PT | 1Hrs | BA | - |
| 96 | 11072 | 29 | Primi | 29/06/2006 | LSCS | Female | 2.4 | 7 | PT | 5days | - | - |
| 97 | 11221 | 27 | G2P1L1 | 30/06/2006 | LN | Female | 1.75 | 7 | PT | 5days | RDS | |
| 98 | 11357 | 25 | G2P1L1 | 4/7/2005 | LN | Male | 2.5 | 8 | Term | 5hrs | Apnoea | |
| 99 | 11784 | 28 | Primi | 11/7/2005 | LN | Male | 1.5 | 2 | PT | 3days | RDS | - |
| 100 | 11876 | 20 | Primi | 9/7/2005 | LN | Male | 2.5 | 3 | Term | 1day | MAS | - |
| 101 | 11982 | 26 | G2P1L0 | 14/07/2005 | LSCS | Male | 3.1 | 3 | Postterm | 13Hrs | MAS | Post Dated/BOH |
| 102 | 11712 | 22 | Primi | 13/07/2005 | LN | Male | 1.2 | 5 | PT | 1day | Prematurity | Twins |
| 103 | 11946 | 23 | G2P1L1 | 14/07/2005 | LN | Male | 3 | 4 | Term | 1day | Cong anomalies | Hydramnios |
| 104 | 12146 | 30 | G3P2L1 | 17/07/2005 | LN | Female | 3 | 4 | Term | 1day | MAS | - |
| 105 | 12133 | 30 | G3P2L2 | 19/07/2005 | LSCS | Female | 2.7 | 1 | Term | 30Min | Anencephaly | Transverse lie |
| 106 | 15460 | 25 | G2P1L1 | 17/07/2005 | LN | Male | 2.6 | 6 | Term | 5days | Aspiration | - |
| 107 | 12388 | 32 | G2P1L1 | 21/07/2005 | A. Breech | Male | 23 | 3 | Term | 30Min | BA | Anaemia |
| 108 | 12347 | 24 | Primi | 22/07/2005 | Forceps | Female | 2.8 | 6 | Term | 30Min | BA | - |
| 109 | 12270 | 26 | G2A1 | 27/07/2005 | LN | Male | 1.2 | 3 | PT | 6days | Sepsis | - |
| 110 | 12852 | 25 | G2P1L1 | 31/07/2005 | LN | Male | 1.4 | 1 | PT | 6days | RDS | - |
| 111 | 12382 | 21 | Primi | 27/07/2005 | LN | Male | 1.6 | 7 | PT | 9hrs | Infection | IP Sepsis |
| 112 | 12993 | 32 | G2P1L1 | 2/8/2005 | LN | Male | 1.2 | 3 | PT | 9Hrs | RDS | - |
| 113 | 13116 | 20 | G3P1L0A1 | 4/8/2005 | LN | Male | 1.5 | 1 | pt | 3days | RDS | Preterm Labour |
| 114 | 13089 | 19 | Primi | 5/8/2005 | A. Breech | Female | 1 | 3 | PT | 3days | Prematurity | - |

| SLN o. | IP No. | Age | Parity | DOD | MOD | Sex | BW (Kg) | Apgar (10) | GA (wks) | Alive Duration | Cause of Death | Maternal Factors |
|--------|--------|-----|----------|------------|-----------|--------|---------|------------|----------|----------------|----------------------|------------------|
| 115 | 13343 | 25 | G2P1L1 | 9/8/2005 | LSCS | Female | 2.1 | 4 | PT | 3days | BA | Pre eclampsia |
| 116 | 13564 | 25 | Primi | 13/08/2005 | LN | Male | 1.1 | 3 | PT | 1day | RDS | - |
| 117 | 13576 | 20 | Primi | 13/08/2005 | LN | Male | 2.25 | 3 | Term | 2days | BA | - |
| 118 | 13908 | 21 | Primi | 19/08/2005 | LN | Male | 1.8 | 3 | PT | 6days | BA | - |
| 119 | 12256 | 25 | G2P1L1 | 17/08/2005 | LSCS | Male | 2.3 | 8 | PT | 3days | | Jaundice |
| 120 | 13945 | 28 | G2P1L1 | 20/08/2005 | LN | Male | 1.2 | 2 | PT | 11hrs | RDS | - |
| 121 | 13835 | 29 | G2P1L1 | 18/08/2005 | LN | Male | 3.4 | 3 | Term | 9Hrs | BA/MAS | - |
| 122 | 13844 | 30 | G2P1L1 | 22/08/2005 | LN | Female | 1.2 | 4 | PT | 10hrs | RDS | - |
| 123 | 14045 | 22 | G2A1 | 22/08/2005 | A. Breech | Male | 1.2 | 3 | PT | 4hrs | RDS | - |
| 124 | 14212 | 22 | G2P1L1 | 28/08/2005 | LN | Male | 1 | 2 | Preterm | 1Hr | RDS | PROM |
| 125 | 14433 | 21 | Primi | 28/08/2005 | LSCS | Female | 2.4 | 3 | Term | 2days | Cong Anomlies | - |
| 126 | 14885 | 21 | G2P1L1 | 31/08/2005 | LN | Female | 1.1 | 1 | PT | 13Hrs | RDS | - |
| 127 | 14710 | 27 | G2P1L1 | 3/9/2005 | LN | Female | 1.75 | 7 | PT | 3days | Infection | - |
| 128 | 14802 | 23 | G2P1L1 | 4/9/2005 | LN | Female | 2.25 | 8 | Term | 4days | MAS | - |
| 129 | 14756 | 18 | Primi | 4/9/2005 | LN | Male | 1.25 | 2 | PT | 2days | Prematurity | |
| 130 | 14925 | 24 | G2P1L1 | 7/9/2005 | LSCS | Female | 2.8 | 1 | Term | 4days | MAS | - |
| 131 | 15066 | 21 | G2P1L1 | 10/9/2005 | LN | Female | 1.2 | 1 | PT | 1day | Prematurity | - |
| 132 | 15090 | 22 | Primi | 10/9/2006 | LN | Female | 2.4 | 7 | PT | 4days | Aspiration Pneumonia | - |
| 133 | 15265 | 21 | Primi | 14/09/2005 | A. Breech | Male | 1.1 | 4 | PT | 1day | BA | - |
| 134 | 15326 | 25 | G4P3L1A2 | 14/09/2005 | LN | Male | 2.5 | 8 | Term | 3days | Infection | - |
| 135 | 14786 | 20 | G2P1L1 | 6/9/2005 | LN | Female | 2.1 | 3 | PT | 7Hrs | RDS | - |
| 136 | 15460 | 25 | G2P1L1 | 17/09/2005 | LN | Male | 2.6 | 8 | Term | 5days | RDS | - |
| 137 | 15750 | 21 | G2P1L1 | 22/09/2005 | A. Breech | Female | 1.25 | 5 | PT | 1day | RDS | - |
| 138 | 15903 | 19 | G3P1L1A1 | 25/09/2005 | LN | Female | 2.3 | 8 | Term | 2days | Cong Anomlies | |
| 139 | 15990 | 20 | G2P1L1 | 25/09/2005 | LN | Male | 1.1 | 2 | PT | 1day | RDS | |
| 140 | 15901 | 28 | G2P1L1 | 25/09/2005 | LN | Male | 1 | 2 | PT | 1day | RDS | - |
| 141 | 14997 | 27 | Primi | 24/09/2005 | LN | Male | 1.8 | 1 | PT | 1day | RDS | |
| 142 | 15955 | 20 | G2P1L1 | 26/09/2005 | LSCS | Female | 1.5 | 1 | PT | 13Hrs | BA | - |
| 143 | 15825 | 27 | G2P1L1 | 23/09/2005 | LSCS | Female | 2 | 1 | Posttem | 1day | MAS | - |
| 144 | 16159 | 22 | Primi | 30/09/2005 | LN | Male | 2.9 | 2 | Term | 1day | BA | - |

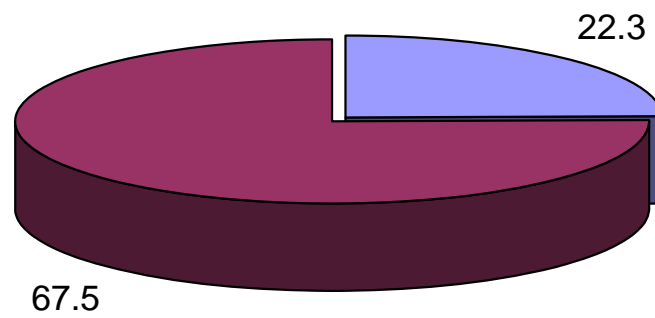
| SLN o. | IP No. | Age | Parity | DOD | MOD | Sex | BW (Kg) | Apgar (10) | GA (wks) | Alive Duration | Cause of Death | Maternal Factors |
|--------|--------|-----|--------|------------|-----------|--------|---------|------------|----------|----------------|----------------|------------------|
| 145 | 14929 | 24 | G2P1L1 | 3/10/2005 | LN | Female | 2.9 | 2 | Term | 3days | Infection | - |
| 146 | 15720 | 22 | Primi | 6/10/2005 | A. Breech | Male | 1.7 | 6 | PT | 4days | Infection | - |
| 147 | 16201 | 23 | Primi | 4/10/2005 | LN | Female | 2.6 | 1 | Term | 1day | BA | - |
| 148 | 16409 | 30 | G3P2L2 | 2/10/2005 | LSCS | Male | 2.8 | 3 | Term | 2days | BA | Labour |
| 149 | 16389 | 18 | Primi | 8/10/2006 | LN | Male | 1.3 | 4 | PT | 1day | BA | Heart disease |
| 150 | 16326 | 29 | G2P1L1 | 4/10/2005 | LN | Male | 2.7 | 3 | Term | 1day | BA | - |
| 151 | 16779 | 28 | Primi | 16/10/2005 | LN | Female | 1.5 | 2 | PT | 1day | RDS | - |
| 152 | 17176 | 23 | G2P1L1 | 16/10/2005 | LN | Male | 2.7 | 1 | Term | 4hrs | BA | - |
| 153 | 16826 | 22 | G2P1L1 | 11/10/2005 | LN | Male | 1.2 | 2 | PT | 2Hrs | BA | - |
| 154 | 16917 | 20 | Primi | 12/10/2005 | LN | Male | 2.5 | 2 | Term | 22hrs | BA | - |
| 155 | 16909 | 25 | Primi | 13/10/2005 | LN | Female | 2.5 | 2 | Term | | BA | - |
| 156 | 16885 | 25 | G2P1L1 | 16/10/2005 | LN | Male | 2.4 | 6 | Term | 3days | BA | - |
| 157 | 17433 | 24 | Primi | 21/10/2005 | LN | Male | 1.2 | 4 | PT | 1day | RDS | - |
| 158 | 17339 | 23 | G2P1L1 | 20/10/2005 | LSCS | Male | 3.4 | 3 | Term | 1day | MAS | - |
| 159 | 17448 | 21 | Primi | 23/10/2005 | LN | Female | 2.2 | 2 | Term | 1day | BA | - |
| 160 | 17741 | 24 | G2P1L1 | 27/10/2005 | LN | Male | 1.2 | 2 | PT | 1day | RDS | - |
| 161 | 18288 | 22 | Primi | 8/11/2005 | LN | Female | 1.7 | 1 | PT | 30Min | BA | - |
| 162 | 18491 | 24 | Primi | 7/11/2005 | LN | Male | 1.2 | 2 | PT | 5days | RDS | - |
| 163 | 18151 | 27 | G2P1L1 | 10/11/2005 | LSCS | Male | 2.6 | 1 | Term | 1day | | |
| 164 | 18702 | 26 | Primi | 10/11/2005 | LN | Female | 2.5 | 8 | Term | 3days | MAS | |
| 165 | 18502 | 27 | G2P1L1 | 13/11/2005 | LN | Male | 2.1 | 2 | Term | 1day | BA | |
| 166 | 18514 | 20 | G2P1L1 | 15/11/2005 | LN | Female | 1.6 | 7 | PT | 6days | RDS | |
| 167 | 18874 | 20 | G2P1L1 | 15/11/2005 | LN | Male | 2 | 3 | PT | 4days | RDS | |

**DISTRIBUTION OF PERINATAL DEATH IN RELATION TO
GESTATIONAL AGE**



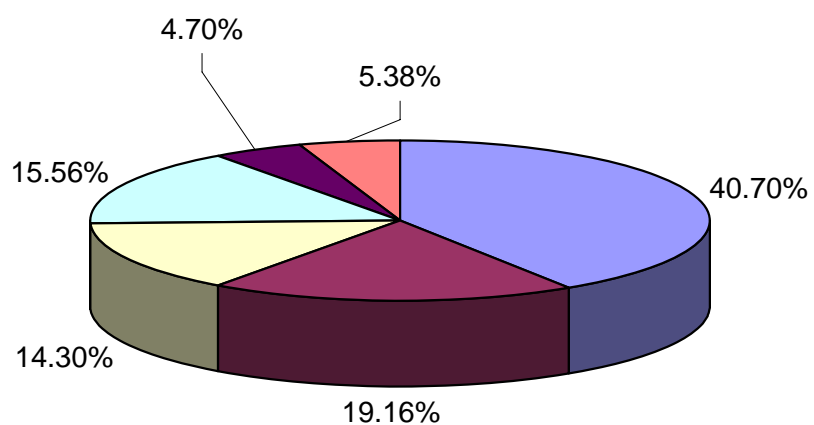


PERINATAL MORTALITY IN RELATION TO ANTENATAL VISITS



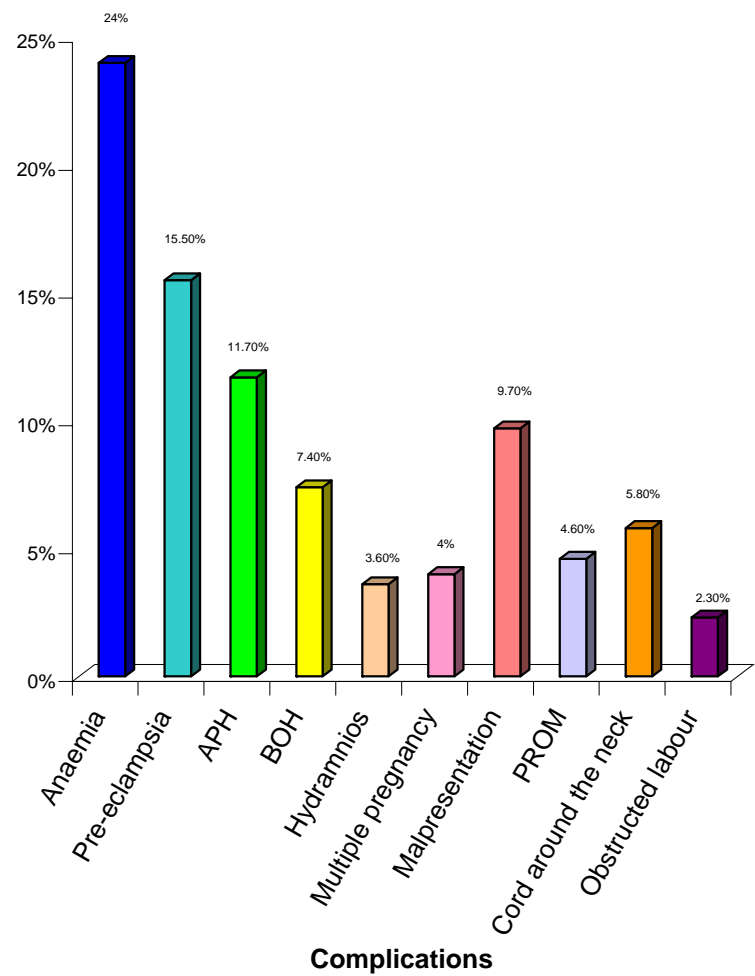
■ Booked ■ Unbooked

CAUSES FOR EARLY NEONATAL DEATHS

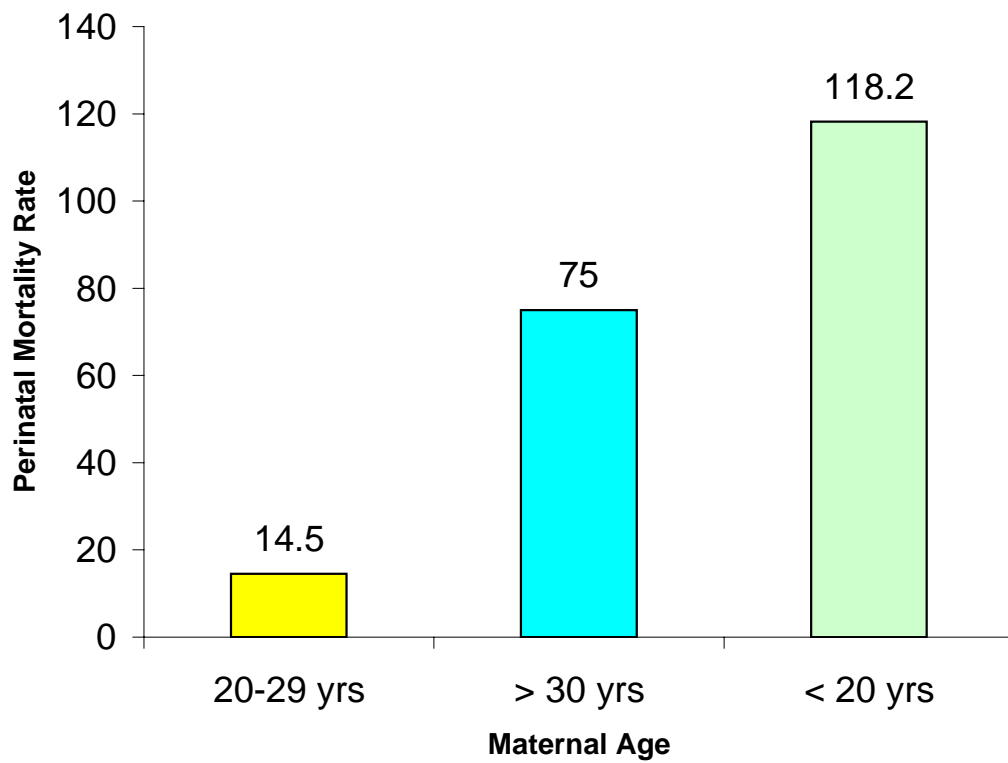


| | | |
|---------------------|------------------------|------------------------|
| ■ Perinatal Hypoxia | ■ Septicemia | ■ Respiratory distress |
| ■ Prematurity | ■ Congenital anomalies | ■ Others |

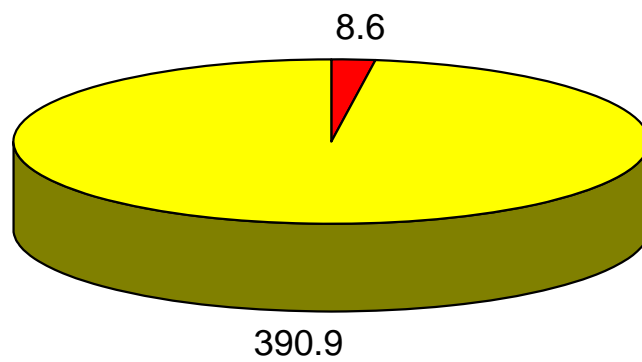
**OBSTETRIC COMPLICATIONS
ASSOCIATED WITH PERINATAL MORTALITY**



PERINATAL MORTALITY IN RELATION TO MATERNAL AGE

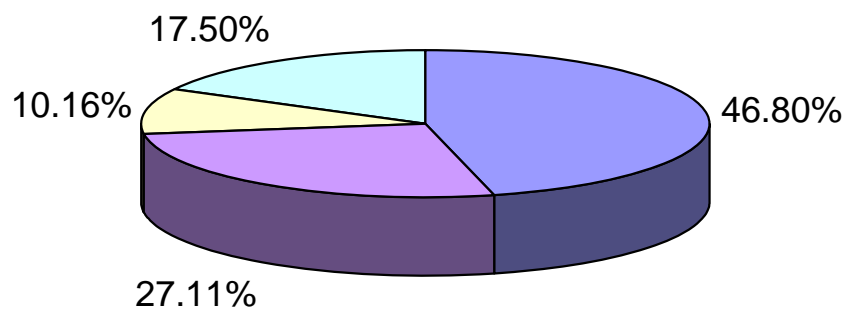


PERINATAL MORTALITY AND BIRTH WEIGHT



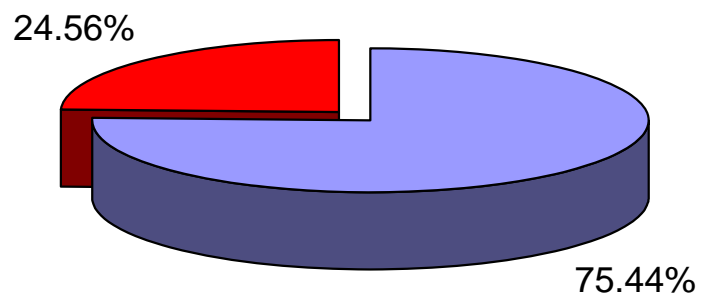
■ > 2.5kg ■ < 2.5kg

CAUSES FOR LATE FETAL DEATHS



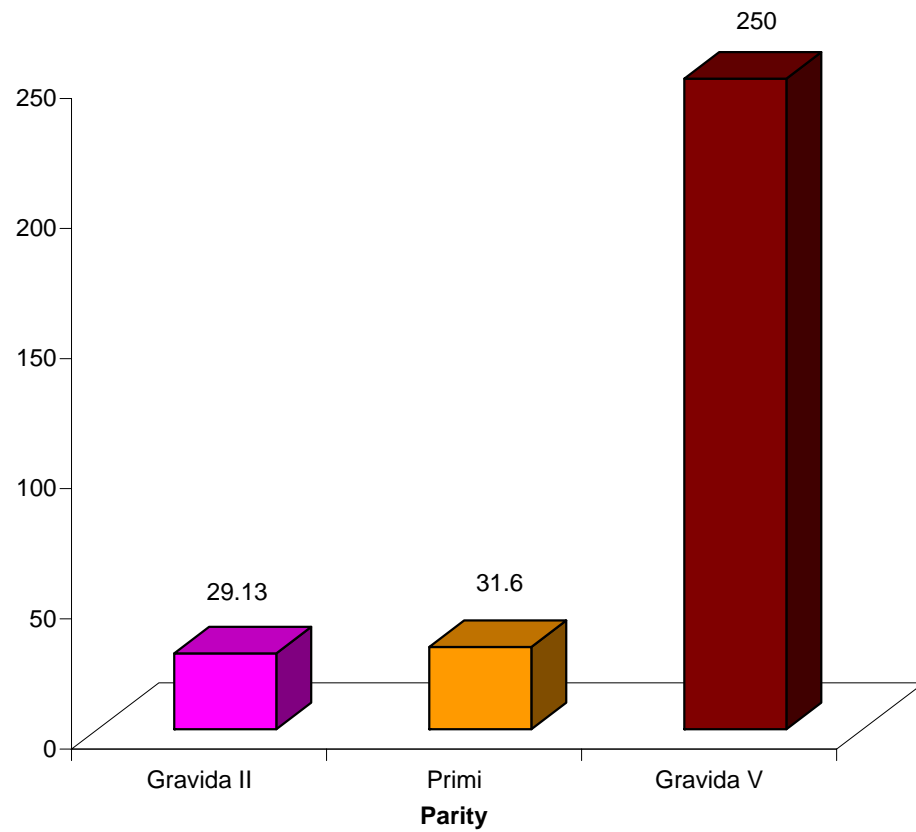
■ Macerated still births ■ Birth asphyxia ■ Congenital anomalies ■ Pre-maturity

DISTRIBUTION OF PERINATAL DEATH IN RELATION TO BIRTH WEIGHT

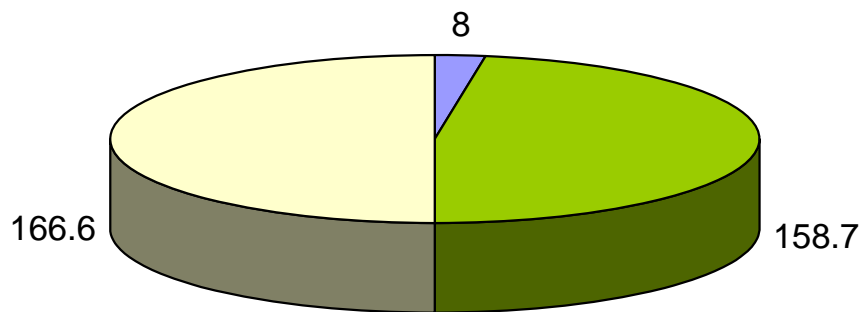


■ < 2.5kg ■ > 2.5kg

PERINATAL MORTALITY IN RELATION TO PARITY

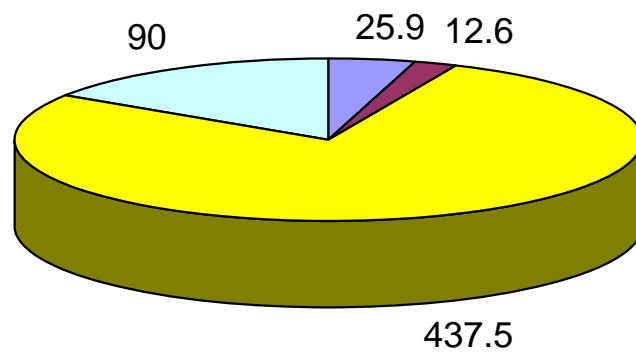


PERINATAL MORTALITY AND GESTATIONAL AGE



■ Term ■ Preterm ■ Post-term

PERINATAL MORTALITY IN RELATION TO MODE OF DELIVERY



Labour Natural LSCS Breech Forceps

| LATE FETAL DEATH | | | | | | | | | | |
|------------------|--------|-----|----------|------|------|-----|------|----|-----------------|--------------------------|
| S.No. | IP.No. | Age | Parity | DOD | MOD | Sex | Wt. | GA | Causes of Death | Maternal Factor |
| 1 | 5053 | 30 | G2P1L1 | 2/4 | V.C | F | 1.2 | PT | BA | Hb <8gms |
| 2 | 5534 | 22 | Primi | 2/4 | AB | F | 2.8 | T | IUD | |
| 3 | 5514 | 22 | G3P1L1A1 | 2/4 | V.C | M | 1.4 | PT | BA | Hb <8gm, BOH |
| 4 | 5628 | 21 | Primi | 3/4 | V.C | M | 2.27 | T | BA | Cord Prolapse |
| 5 | 5663 | 23 | Primi | 7/4 | V.C | M | 2.8 | T | BA | Preeclampsia |
| 6 | 5917 | 23 | G2P1L1 | 8/4 | LSCS | M | 1.2 | PT | BA | Placenta Previa |
| 7 | 6099 | 21 | Primi | 10/4 | V.C | F | 1.2 | PT | BA | Multiple Pregnancy & APH |
| 8 | 6111 | 20 | Primi | 10/4 | V.C | F | 1.1 | PT | BA | |
| 9 | 6102 | 25 | Primi | 10/4 | V.C | M | 2.8 | PT | IUD | |
| 10 | 6161 | 22 | G3P1L1A1 | 11/4 | V.C | M | 1.8 | PT | IUD | Hb <8gms |
| 11 | 6117 | 25 | G2P1L1 | 11/4 | LSCS | M | 3.25 | PT | BA | Obstructed Labour |
| 12 | 6231 | 19 | Primi | 13/4 | AB | M | 2 | PT | IUD | Jaundice |
| 13 | 6826 | 25 | G2P1L1 | 14/4 | V.C | M | 3 | T | BA | Preeclampsia APH |
| 14 | 6377 | 21 | Primi | 15/4 | V.C | M | 1.5 | PT | BA | Preeclampsia |
| 15 | 6203 | 25 | G2P1L1 | 17/4 | V.C | M | 1.1 | PT | BA | BOH Preeclampsia |
| 16 | 6313 | 25 | G2P1L1 | 16/4 | V.C | F | 1.9 | PT | IUD | Pyrexia |
| 17 | 6521 | 29 | G3P1L1A1 | 19/4 | V.C | M | 2.4 | PT | Infection | Hb < 8gms, PROM |
| 18 | 6763 | 20 | G2P1L1 | 21/4 | V.C | M | 1.3 | PT | IUD | BOH |
| 19 | 6834 | 25 | G2P1L1 | 22/4 | V.C | F | 1.3 | PT | Anencephaly | BOH |
| 20 | 6445 | 30 | G3P1L1A1 | 22/4 | V.C | F | 3.5 | PT | IUD | Hb <8gms |
| 21 | 6861 | 20 | Primi | 24/4 | V.C | M | 1.9 | PT | BA | Preeclampsia APH |
| 22 | 6736 | 25 | G2P1L1 | 21/4 | LN | F | 1.7 | PT | IUD | Hb <8gms, APH |
| 23 | 6941 | 25 | Primi | 24/4 | V.C | M | 2.25 | T | IUD | |
| 24 | 7118 | 19 | Primi | 27/4 | V.C | F | 2.7 | T | IUD | Hydramnios |
| 25 | 6873 | 30 | Primi | 30/4 | V.C | M | 1.5 | T | BA | AP Eclampsia |
| 26 | 6802 | 21 | Primi | 23/4 | V.C | M | 1.5 | PT | BA | AP Eclampsia |
| 27 | 7098 | 24 | G2P1L1 | 28/4 | V.C | F | 1.1 | PT | IUD | BOH Preeclampsia |
| 28 | 7221 | 25 | G3P1L1A1 | 30/4 | V.C | F | 1.5 | PT | IUD | Hb <8gms, BOH |
| 29 | 7117 | 22 | Primi | 27/4 | LSCS | M | 3.25 | T | Infection | IP Sepsis PROM |
| 30 | 6755 | 17 | Primi | 21/4 | LSCS | F | 1.2 | PT | BA | APH & Preeclampsia |
| 31 | 7188 | 20 | Primi | 1/5 | V.C | F | 2.25 | T | IUD | Oligohydramnios |
| 32 | 7346 | 24 | G2P1L1 | 1/5 | V.C | M | 1.25 | PT | IUD | Preeclampsia |
| 33 | 7166 | 22 | Primi | 29/4 | V.C | M | 1 | PT | IUD | |
| 34 | 7490 | 26 | G2P1L1 | 4/5 | V.C | M | 2 | PT | IUD | <8gms |

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|----|-------|----|----------|------|------|---|------|----|-------------------|-------------------------|
| 35 | 7500 | 18 | G2A2 | 4/5 | V.C | M | 1.1 | PT | BA | PROM BOH |
| 36 | 7851 | 25 | G2P2L2 | 10/5 | V.C | M | 2.5 | T | BA | APH Hb<8gms |
| 37 | 7140 | 19 | Primi | 11/5 | V.C | M | 1.8 | T | BA | Preeclampsia |
| 38 | 7989 | 29 | G2P1L1A1 | 12/5 | V.C | F | 1.25 | PT | BA | APH BOH |
| 39 | 7754 | 20 | Primi | 13/5 | V.C | F | 1.5 | PT | P | Hydramnios |
| 40 | 7534 | 26 | G2P2L1 | 12/5 | V.C | M | 1.2 | PT | P | BOH <8gms |
| 41 | 8413 | 22 | G2P1L1 | 13/5 | V.C | M | 2.2 | T | IUD | Preeclampsia BOH |
| 42 | 8443 | 23 | G2P2L1 | 16/5 | V.C | M | 1.2 | PT | P | Preeclampsia APH |
| 43 | 8072 | 20 | Primi | 1785 | V.C | F | 1.4 | PT | IUD | |
| 44 | 8419 | 22 | G2P2L1 | 18/5 | V.C | F | 1.4 | PT | IUD | <8gms |
| 45 | 8419 | 21 | G2A2 | 18/5 | V.C | M | 2.2 | T | BA | PROM |
| 46 | 8601 | 26 | Primi | 19/5 | V.C | M | 1.2 | PT | P | Preeclampsia APH |
| 47 | 8698 | 22 | G2P2L1 | 22/5 | V.C | M | 2.1 | PT | Cong anomalies | |
| 48 | 8743 | 21 | G2P1L1 | 25/5 | V.C | M | 3 | T | IUD | <8gms |
| 49 | 8584 | 25 | Primi | 22/5 | A.B | F | 1.1 | PT | BA | APH |
| 50 | 8929 | 27 | Primi | 26/5 | V.C | M | 2.1 | PT | BA | Preeclampsia APH |
| 51 | 8760 | 20 | Primi | 24/5 | LSCS | M | 1.9 | PT | anomalies | Breech |
| 52 | 8962 | 21 | G2A2 | 26/5 | A.B | M | 1.6 | PT | BA | Breech - PROM BOH |
| 53 | 9193 | 28 | G2A2 | 30/5 | V.C | F | 1.3 | PT | IUD | BOH |
| 54 | 9174 | 21 | G2P1L1 | 30/5 | V.C | M | 1.3 | PT | IUD | <8gms |
| 55 | 9233 | 25 | G2P1L1 | 30/5 | V.C | M | 2.2 | T | Infection | PROM IP Sepsis |
| 56 | 9161 | 20 | Primi | 31/5 | V.C | M | 1.6 | PT | IUD | |
| 57 | 9283 | 20 | G2P2L1 | 31/5 | V.C | M | 1.1 | PT | P | BOH <8gms |
| 58 | 9026 | 21 | Primi | 27/5 | V.C | M | 2.75 | T | IUD | |
| 59 | 8657 | 19 | Primi | 31/5 | V.C | F | 1 | PT | IUD | Preeclampsia <8gms |
| 60 | 9368 | 24 | Primi | 2/6 | V.B | F | 1.6 | PT | BA | Rh-ve |
| 61 | 9483 | 20 | G3P2L1 | 3/6 | V.C | M | 1.2 | PT | BA | BOH <8gms |
| 62 | 9494 | 22 | G2A1 | 4/6 | V.C | M | 1.6 | PT | Cong anomalies | Hydramnios |
| 63 | 9593 | 23 | G2P1L1 | 6/6 | V.C | F | 1.8 | PT | IUD | <8gms |
| 64 | 9711 | 20 | G2P1L1 | 7/6 | V.C | M | 2.5 | T | BA | APH <8gm |
| 65 | 9796 | 29 | G2P1L1 | 8/6 | V.C | F | 2.8 | T | BA | Preeclampsia APH |
| 66 | 9821 | 26 | G2P1L1 | 8/6 | V.C | M | 1.9 | PT | BA | BOH PROM <8gm |
| 67 | 9886 | 27 | G2A1 | 9/6 | A.B | M | 1.1 | PT | P | BOH |
| 68 | 9941 | 24 | Primi | 1/6 | V.C | F | 2.6 | T | IUD | Prolonged Pregnancy |
| 69 | 1012 | 26 | G3P2L1A2 | 13/6 | V.C | M | 1.6 | PT | P | <8gms BOH |
| 70 | 10050 | 25 | G2P1L1 | 12/6 | V.C | F | 1.1 | PT | IUD | Severe Preeclampsia APH |

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|-----|-------|----|----------|------|------|---|------|----|--------------------|----------------------------|
| 71 | 10191 | 20 | Primi | 15/6 | V.C | F | 1.5 | PT | IUD | |
| 72 | 10333 | 35 | G3P1L2A1 | 16/6 | V.C | F | 1.25 | PT | IUD | <8gm BOH |
| 73 | 10154 | 26 | Primi | 16/6 | V.C | M | 2.25 | T | IUD | |
| 74 | 10034 | 22 | G2A1 | 17/6 | V.C | M | 1.5 | PT | IUD | Multiple Pregnancy BOH |
| 75 | 10350 | 24 | G3P2L1A1 | 18/6 | V.C | M | 1.35 | PT | BA | Severe Preeclampsia <8gm |
| 76 | 10511 | 21 | Primi | 20/6 | V.C | M | 1.1 | PT | IUD | |
| 77 | 10536 | 26 | G3P2L2 | 21/6 | V.C | F | 1.8 | PT | IUD | <8gm Rh-ve |
| 78 | 10592 | 22 | Primi | 22/6 | V.C | M | 1.9 | PT | BA | Preeclampsia APH |
| 79 | 10685 | 22 | G2P2L2 | 23/6 | V.C | M | 2.25 | T | IUD | |
| 80 | 10818 | 22 | G2P2L2 | 24/6 | V.C | M | 2.9 | T | IUD | Oligohydramnios BOH <8gm |
| 81 | 11007 | 20 | Primi | 27/6 | V.C | M | 1.75 | PT | IUD | |
| 82 | 10916 | 25 | G3P2L2 | 27/6 | V.C | M | 1.2 | PT | Hydrops fetalis | BOH |
| 83 | 10996 | 19 | Primi | 28/6 | V.C | F | 1.6 | PT | IUD | |
| 84 | 11192 | 30 | G2P1L1 | 28/6 | V.C | M | 1.7 | PT | IUD | |
| 85 | 11192 | 25 | G2P1L1 | 30/6 | V.C | M | 2.25 | T | IUD | Preeclampsia <8gm |
| 86 | 11212 | 22 | G2P1L1 | 3/6 | A.B | M | 2.5 | T | IUD | <8gm Rh-ve |
| 87 | 11246 | 30 | G3P1L1 | 1/7 | V.C | F | 2.45 | T | IUD | Rh-ve |
| 88 | 10559 | 30 | G2P1L1 | 1/7 | LSCS | M | 1.75 | PT | IUD | Severe Preeclampsia |
| 89 | 10933 | 28 | Primi | 2/7 | V.C | M | 1 | PT | IUD | Hydramnios <8gm |
| 90 | 11290 | 32 | G2A1 | 2/7 | V.C | F | 2.7 | T | IUD | BOH |
| 91 | 11316 | 19 | Primi | 3/7 | LSCS | M | 1.6 | PT | BA | APH |
| 92 | 11071 | 26 | G2P1L1 | 4/7 | V.C | M | 1.2 | PT | Multiple anomalies | Hydramnios |
| 93 | 11409 | 24 | G3P2L2 | 4/7 | LSCS | F | 3.4 | T | BA | BOH <8gm Obstructed Labour |
| 94 | 11532 | 19 | Primi | 5/7 | A.B | M | 2.6 | T | | BOH |
| 95 | 11603 | 31 | G2P1L1 | 6/7 | V.C | M | 2.9 | T | BA | Breech |
| 96 | 11615 | 31 | G2P1L1 | 8/7 | V.C | F | 3.2 | T | IUD | BOH <8gm |
| 97 | 11706 | 36 | G2P1L1 | 11/7 | V.C | M | 2.5 | T | | |
| 98 | 11766 | 26 | G2P1L1 | 12/7 | V.C | M | 1 | PT | Cong anomalies | Hydramnios <8gm |
| 99 | 11838 | 28 | G2P1L1 | 12/7 | A.B | M | 1.5 | PT | IUD | |
| 100 | 11349 | 25 | G2P1L1 | 13/7 | LSCS | M | 3 | T | IUD | <8gm |
| 101 | 11914 | 25 | G2A1 | 18/7 | V.C | M | 3.1 | T | Infection | IP Sepsis |
| 102 | 11998 | 29 | G3P2L2 | 19/7 | A.B | M | 2.5 | T | | BOH <8gm |
| 103 | 12202 | 21 | Primi | 20/7 | V.C | F | 1.75 | PT | BA | Preeclampsia |
| 104 | 12349 | 30 | G4P2L2 | 21/7 | LSCS | M | 2.4 | PT | BA | Placenta Previa <8gm |

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|-----|-------|----|----------|------|------------|---|------|----|-----|---------------------------------|
| 105 | 12342 | 27 | G3P2L1A1 | 21/7 | V.C | F | 2 | PT | BA | Severe Preeclampsia |
| 106 | 12315 | 24 | G2P1L1 | 21/7 | V.C | M | 1 | PT | IUD | BOH |
| 107 | 12401 | 28 | G2P1L1 | 22/7 | V.C | F | 1.2 | PT | BA | APH <8gm |
| 108 | 12460 | 35 | G4P1L1 | 23/7 | V.C | M | 1.8 | PT | IUD | BOH |
| 109 | 12462 | 26 | G2P1L1 | 23/7 | V.C | M | 1.7 | PT | IUD | Jaundice |
| 110 | 12546 | 29 | G3P2L2 | 24/7 | V.C | M | 2.5 | T | IUD | <8gm |
| 111 | 12592 | 25 | G2P1L1 | 24/7 | A.B | M | 2.75 | T | IUD | |
| 112 | 12642 | 25 | G3P2L2 | 26/7 | V.C | F | 3.2 | T | BA | APH <8gm |
| 113 | 12710 | 25 | G2P1L1 | 27/7 | V.C | M | 1.2 | PT | IUD | |
| 114 | 12673 | 25 | G2P1L1 | 27/7 | LSCS | F | 2.5 | T | BA | PROM Obstructed Labour |
| 115 | 12641 | 22 | G2P1L1 | 28/7 | V.C | M | 1.25 | PT | IUD | Multiple Pregnancies <8gm |
| 116 | 12640 | 20 | Primi | 29/7 | A.B | M | 1.3 | PT | IUD | |
| 117 | 12814 | 37 | G3P2L2 | 30/7 | LSCS | M | 2.45 | PT | BA | Obstructed labour |
| 118 | 12938 | 21 | G3P2L2 | 1/8 | V.C | F | 1 | PT | IUD | |
| 119 | 12910 | 25 | G2P1L1 | 1/8 | V.C | F | 1 | PT | BA | AP Eclampsia |
| 120 | 12974 | 25 | Primi | 2/8 | A.B | M | 1.15 | PT | P | Multiple Pregnancy <8gm (II) |
| 121 | 13034 | 21 | G3P1L1A1 | 3/8 | V.C | M | 1.6 | PT | IUD | |
| 122 | 13103 | 24 | G2P1L1 | 4/8 | V.C | M | 2.5 | T | IUD | BOH |
| 123 | 13146 | 23 | Primi | 5/8 | V.C | M | 2.6 | T | | |
| 124 | 13198 | 22 | Primi | 6/8 | V.C | F | 3 | PT | IUD | Prolonged Pregnancy |
| 125 | 13117 | 28 | G4P2L1A2 | 7/8 | V.C | F | 1.5 | PT | BA | BOH Preeclampsia <8gm |
| 126 | 13119 | 27 | Primi | 7/8 | V.C | F | 1.5 | PT | BA | |
| 127 | 13195 | 23 | G2A1 | 7/8 | V.C | M | 2.7 | T | IUD | |
| 128 | 13201 | 24 | G2P2L1 | 7/8 | V.C | M | 1.1 | PT | BA | BOH APH |
| 129 | 13312 | 29 | G2A1 | 8/8 | V.C | M | 2.5 | T | IUD | BOH |
| 130 | 13366 | 21 | G2P1L1 | 9/8 | V.C | M | 2.3 | PT | BA | APH with DIC <8gms |
| 131 | 12714 | 20 | G2P1L1 | 10/8 | Laparotomy | M | 1.1 | PT | P | Rupture Uterus |
| 132 | 12171 | 21 | Primi | 10/8 | V.C | M | 1.05 | PT | P | |
| 133 | 13409 | 19 | Primi | 10/8 | V.C | M | 1.4 | PT | P | <8gm |
| 134 | 13469 | 32 | G2P1L1 | 10/8 | V.C | M | 1.2 | PT | P | |
| 135 | 13502 | 21 | G4P2L1A2 | 11/8 | V.C | F | 1.2 | PT | IUD | <8gm |
| 136 | 13559 | 26 | G2A1 | 13/8 | V.C | M | 1.1 | PT | P | |
| 137 | 13608 | 27 | Primi | 14/8 | V.C | M | 1.4 | PT | P | |
| 138 | 12639 | 18 | Primi | 15/8 | V.C | M | 1.1 | PT | IUD | <8gm |
| 139 | 12786 | 23 | G2P1L1 | 16/8 | V.C | M | 1.3 | PT | P | BOH |

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|-----|-------|----|-------|------|------|---|-----|----|---|------------------|
| 140 | 12872 | 24 | Primi | 17/8 | LSCS | M | 1.4 | PT | P | Preeclampsia APH |
|-----|-------|----|-------|------|------|---|-----|----|---|------------------|

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|-----|-------|----|----------|------|------|---|------|----|------------------|------------------------------|
| 141 | 13851 | 28 | G2P1L1 | 18/8 | LSCS | M | 1.75 | PT | BA | Preclampsia APH |
| 142 | 13896 | 22 | Primi | 19/8 | V.C | M | 1.1 | PT | P | |
| 143 | 13946 | 21 | Primi | 20/8 | V.C | M | 2.5 | T | BA | PROM Preeclampsia |
| 144 | 13992 | 29 | G2P2L2 | 21/8 | V.C | M | 1 | PT | IUD | <8gm |
| 145 | 13949 | 18 | Primi | 21/8 | V.C | M | 3.5 | T | BA | Obstructed labour |
| 146 | 14015 | 21 | G2P1L1 | 22/8 | V.C | M | 1.3 | PT | P | BOH Preeclampsia APH |
| 147 | 14118 | 23 | Primi | 22/8 | V.C | M | 1.1 | PT | P | <8gm |
| 148 | 14207 | 22 | Primi | 24/8 | V.C | F | 1.75 | PT | IUD | Preeclampsia APH |
| 149 | 12750 | 26 | G2P1L1 | 25/8 | V.C | M | 2 | PT | IUD | Preeclampsia |
| 150 | 14234 | 22 | G2P1L1 | 25/8 | V.C | M | 2.75 | T | BA | Cord Prolapse <8gm |
| 151 | 14030 | 22 | G3P1L1A1 | 25/8 | V.C | F | 1.6 | PT | IUD | BOH hydramnos |
| 152 | 14239 | 29 | Primi | 25/8 | V.C | M | 2 | PT | IUD Anomalies | Preeclampsia APH |
| 153 | 14294 | 25 | G2P1L1 | 26/8 | LSCS | M | 1.25 | PT | BA | BOH APH <8gm Preeclampsia |
| 154 | 14324 | 25 | Primi | 27/8 | A.B | M | 1.5 | PT | BA (I) | Multiple Pregnancies |
| 155 | 14530 | 20 | Primi | 30/8 | V.C | F | 3.3 | T | IUD | |
| 156 | 14556 | 31 | G2P1L1 | 31/8 | V.C | F | 2.8 | T | IUD | <8gms |
| 157 | 14522 | 18 | Primi | 30/8 | V.C | F | 2.7 | T | IUD | |
| 158 | 14572 | 28 | G3P1L1A1 | 31/8 | V.C | M | 1.6 | PT | BA | PROM < 8gms |
| 159 | 14590 | 25 | G3P1L1A1 | 1/9 | V.C | M | 2.7 | T | IUD | Nuchal cord (tight) |
| 160 | 14452 | 20 | Primi | 2/9 | V.C | M | 2.8 | T | IUD | Preeclampsia |
| 161 | 14650 | 20 | G2P1L1 | 2/9 | V.C | F | 1.6 | PT | anomalies | Hydramnios |
| 162 | 14682 | 22 | Primi | 3/9 | V.C | M | 1.4 | PT | P | <8gm |
| 163 | 14701 | 23 | G2P1L1 | 3/9 | V.C | F | 1.9 | PT | P | Preclampsia APH |
| 164 | 14705 | 25 | Primi | 4/9 | A.B | F | 2 | PT | anomalies | Oligohydramnios |
| 165 | 14766 | 24 | G2P11 | 5/9 | V.C | F | 1.6 | PT | P | |
| 166 | 14801 | 29 | G3P1L1A1 | 5/9 | V.C | F | 1.5 | PT | P | <8gm |
| 167 | 14877 | 27 | G2P1L1 | 6/9 | V.C | F | 2.7 | T | IUD | Rh-ve |
| 168 | 14904 | 22 | G2A1 | 6/9 | V.C | F | 1.6 | PT | IUD | |
| 169 | 14949 | 20 | Primi | 7/9 | V.C | F | 3.7 | T | IUD | Preclampsia APH |
| 170 | 14964 | 34 | G2P1L1 | 7/9 | V.C | F | 1.1 | PT | IUD | Rh-ve |
| 171 | 14991 | 20 | G3P2L2 | 8/9 | V.C | M | 3 | T | IUD | <8gm |
| 172 | 14972 | 30 | G3P2L2 | 11/9 | V.C | F | 3 | PT | IUD | Prolonged Pregnancy |
| 173 | 15042 | 22 | Primi | 11/9 | V.C | F | 1.4 | PT | P | |
| 174 | 15094 | 31 | Primi | 11/9 | V.C | F | 1.1 | PT | P | Hydramnios |
| 175 | 15166 | 22 | Primi | 12/9 | A.B | M | 1.7 | PT | Anencephaly | <8gms |

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|-----|-------|----|----------|------|------|---|------|-----------|-----------|-------------------------------------|
| 176 | 15036 | 32 | G2P1L1 | 13/9 | V.C | F | 1.1 | PT | IUD | Pyrexia |
| 177 | 15182 | 29 | G2P1L1 | 13/9 | V.C | F | 1.1 | PT | IUD | |
| 178 | 15252 | 26 | G3P1L1A1 | 14/9 | V.C | F | 1.3 | PT | P BA | Preeclampsia APH |
| 179 | 15342 | 21 | G4P1L1A2 | 14/9 | LSCS | M | 1.8 | PT | BA | APH with Preeclampsia <8gms |
| 180 | 15198 | 20 | Primi | 14/9 | V.C | F | 1.9 | PT | IUD | Hydramnios |
| 181 | 15392 | 23 | Primi | 15/9 | V.B | F | 1.5 | PT | IUD | |
| 182 | 15332 | 22 | G2P1L1 | 16/9 | V.C | M | 2.3 | T | IUD | |
| 183 | 15346 | 20 | G2P1L1 | 16/9 | V.C | M | 2.4 | T | IUD | <8gms |
| 184 | 15438 | 25 | G2P1L1 | 17/9 | V.C | F | 1.25 | PT | P | PROM |
| 185 | 15274 | 25 | G2A2 | 17/9 | V.C | M | 1 | PT | anomalies | Hydramnios |
| 186 | 15466 | 24 | G3P1L1A1 | 17/9 | V.C | F | 1 | PT | P | BOH <8gm |
| 187 | 15528 | 22 | G2P1L1 | 18/9 | A.B | M | 2 | PT | IUD | Preeclampsia APH |
| 188 | 15504 | 21 | Primi | 18/9 | V.C | F | 1.5 | PT | P | |
| 189 | 15424 | 25 | G3P1L1 | 19/9 | V.C | F | 1.5 | PT | IUD | BOH <8gms |
| 190 | 15477 | 19 | Primi | 19/9 | V.C | M | 1.2 | PT | BA | Preeclampsia APH |
| 191 | 15584 | 22 | G2P1L1 | 20/9 | V.C | F | 1 | PT | P | |
| 192 | 15596 | 20 | G2A1 | 20/9 | V.C | F | 1.3 | PT | P | Preeclampsia APH |
| 193 | 15626 | 22 | Primi | 21/9 | V.C | M | 2 | PT | BA | Rh-ve (IUGR) |
| 194 | 15681 | 22 | G2P1L1 | 21/9 | LSCS | M | 1.75 | PT | IUD | PROM Obstructed Labour |
| 195 | 15712 | 23 | Primi | 22/9 | V.C | F | 1.1 | PT | P | |
| 196 | 15744 | 21 | Primi | 22/9 | V.C | M | 1.5 | PT | IUD | Preeclampsia APH |
| 197 | 15792 | 28 | G3P2L2 | 23/9 | LSCS | M | 3.8 | T | BA | Obstructed labour |
| 198 | 15782 | 31 | Primi | 23/9 | V.C | M | 2.1 | PT | IUD | HD & Preeclampsia |
| 199 | 15641 | 26 | G4P2L2A1 | 21/9 | V.C | F | 2.25 | T | BA | APH <8gms |
| 200 | 15812 | 22 | Primi | 24/9 | V.C | F | 1.25 | PT | P | Hydramnios |
| 201 | 15866 | 23 | G2A1 | 24/9 | V.C | F | 1 | PT | P | Preeclampsia APH |
| 202 | 15951 | 25 | G3P2L2 | 25/9 | V.C | M | 2.75 | T | BA | BOH <8gms Cordprolapse |
| 203 | 15977 | 20 | Primi | 26/9 | V.C | M | 1 | PT | P | Preeclampsia |
| 204 | 15910 | 21 | Primi | 26/9 | LSCS | F | 28 | Post Term | BA | IP Sepsis Prolonged Pregnancy <8gms |
| 205 | 16014 | 26 | G2A1 | 27/9 | V.C | F | 1 | PT | P | BOH |
| 206 | 16138 | 27 | G2P1L1 | 29/9 | V.C | F | 1.5 | PT | IUD | |
| 207 | 16181 | 23 | Primi | 30/9 | V.C | F | 1.5 | PT | BA | APH With PIH |
| 208 | 16212 | 23 | G2P1L1 | 30/9 | V.C | F | 1.4 | PT | P | |
| 209 | 16261 | 25 | G3P1L1A1 | 1/10 | A.B | M | 3.3 | Post Term | IUD | Prolonged Pregnancy <8gms |
| 210 | 16306 | 24 | G2A2 | 2/10 | V.C | F | 1.1 | P.T | P | BOH |

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|-----|-------|----|--------|-------|------|---|------|-----------|-------------|------------------------|
| 211 | 16346 | 25 | G2P1L1 | 3/10 | V.C | F | 1.3 | P.T | P | BOH |
| 212 | 16383 | 24 | G2P1L1 | 4/10 | V.C | M | 1 | P.T | IUD | BOH |
| 213 | 16419 | 24 | G2A1 | 5/10 | V.C | F | 1.3 | P.T | P | BOH |
| 214 | 16512 | 22 | Primi | 5/10 | V.C | F | 1.45 | P.T | P | Janudice |
| 215 | 16533 | 20 | G2P1L1 | 6/10 | V.C | M | 2.5 | T | IUD | |
| 216 | 16535 | 26 | G2P1L1 | 9/10 | V.C | M | 1 | P.T | Anencephaly | Hydramnios |
| 217 | 16642 | 22 | G2P1L1 | 9/10 | V.C | F | 1.3 | P.T | P | BOH |
| 218 | 16696 | 20 | Primi | 9/10 | V.C | M | 2.4 | T | BA | AP Eclampsia |
| 219 | 16727 | 26 | G2P2L1 | 9/10 | V.C | M | 1 | P.T | IUD | BOH |
| 220 | 16710 | 25 | G2A2 | 10/10 | A.B | M | 1.2 | P.T | P | BOH |
| 221 | 16736 | 20 | Primi | 11/10 | V.C | F | 3 | T | IUD | |
| 222 | 16762 | 22 | G2P1L1 | 12/10 | V.C | F | 1.4 | P.T | P | BOH |
| 223 | 16794 | 29 | G2P2L1 | 12/10 | V.C | F | 1 | P.T | P | |
| 224 | 16800 | 21 | Primi | 13/10 | V.C | M | 1 | P.T | BA | AP Eclampsia |
| 225 | 16842 | 24 | G2P1L1 | 13/10 | V.C | M | 1.2 | P.T | P | BOH |
| 226 | 16903 | 22 | Primi | 13/10 | V.C | F | 2.1 | P.T | Infection | IP Sepsis |
| 227 | 16943 | 23 | G2P1L1 | 14/10 | V.C | M | 1.1 | P.T | IUD | |
| 228 | 16984 | 22 | G2A2 | 15/10 | V.C | F | 1.1 | P.T | P | |
| 229 | 17004 | 24 | Primi | 15/10 | V.C | F | 2.1 | P.T | BA | APH |
| 230 | 17085 | 29 | Primi | 16/10 | V.C | M | 1.75 | P.T | BA | Preeclampsia |
| 231 | 17096 | 36 | Primi | 16/10 | LSCS | M | 1.5 | P.T | BA | PROM Obstructed Labour |
| 232 | 17144 | 22 | G2P1L1 | 16/10 | V.C | M | 1.7 | P.T | anomalies | BOH |
| 233 | 17096 | 22 | G3P2L2 | 16/10 | V.C | M | 2.6 | T | IUD | |
| 234 | 17205 | 31 | G2A2 | 17/10 | V.C | F | 1.6 | P.T | IUD | <8gms |
| 235 | 17214 | 30 | Primi | 17/10 | LSCS | M | 1 | P.T | P | |
| 236 | 17285 | 21 | Primi | 19/10 | V.C | M | 1.7 | P.T | IUD | |
| 237 | 17070 | 24 | Primi | 19/10 | V.C | M | 1.5 | P.T | IUD | Preeclampsia <8gms |
| 238 | 17372 | 24 | G2P1L1 | 20/10 | V.C | F | 2 | P.T | IUD | Preeclampsia <8gms |
| 239 | 17409 | 22 | G2P1L2 | 22/10 | V.C | F | 1.25 | P.T | P | BOH |
| 240 | 17512 | 29 | G2P1L1 | 23/10 | V.C | F | 1.4 | P.T | P | BOH |
| 241 | 17588 | 18 | Primi | 27/10 | V.C | M | 2.4 | Post Term | IUD | Prolonged Pregnancy |
| 242 | 17830 | 25 | G2P1L1 | 29/10 | LSCS | M | 2 | P.T | BA | AP Eclampsia |
| 243 | 17929 | 25 | G2P1L1 | 31/10 | V.C | M | 3.35 | T | IUD | Nuchal Cord |
| 244 | 17997 | 29 | G2P1L1 | 31/10 | V.C | M | 3.5 | T | IUD | BOH <8gms |
| 245 | 17940 | 20 | G2P1L1 | 31/10 | V.C | M | 1.1 | P.T | BA | APH Preeclampsia |
| 246 | 17936 | 21 | G2P1L1 | 7/11 | V.C | M | 2.5 | T | IUD | BOH |

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|-----|-------|----|-------|------|-----|---|-----|-----|-----|---------------------|
| 247 | 17699 | 25 | Primi | 3/11 | V.C | F | 1.2 | P.T | IUD | Severe Preeclampsia |
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|-----|-------|----|----------|-------|------|---|------|-----|-----------|------------------------|
| 248 | 17771 | 26 | Primi | 3/11 | V.B | M | 1.3 | P.T | IUD | |
| 249 | 17762 | 20 | G2P1L1 | 3/11 | A.B | M | 1.05 | P.T | IUD | |
| 250 | 18266 | 26 | G2P1L1 | 4/11 | V.C | M | 1.4 | P.T | IUD | BOH |
| 251 | 18310 | 20 | G2A1 | 5/11 | V.C | M | 1.5 | P.T | IUD | Rh-ve <8gm |
| 252 | 18298 | 21 | G3P1L1 | 5/11 | LSCS | M | 3.1 | T | BA | APH Breech |
| 253 | 18385 | 30 | Primi | 7/11 | LSCS | M | 1.3 | P.T | P | PROM Hand Prolapse |
| 254 | 18513 | 35 | G3P1L1A1 | 8/11 | V.C | M | 1.7 | P.T | BA | APH <8gms |
| 255 | 18445 | 21 | G2P1L1 | 9/11 | V.C | M | 1.9 | P.T | IUD | |
| 256 | 18601 | 25 | Primi | 10/11 | V.C | M | 1 | P.T | IUD | |
| 257 | 18706 | 26 | Primi | 9/11 | V.C | F | 2.5 | T | IUD | Preeclampsia |
| 258 | 18394 | 26 | G3P1L1 | 7/11 | V.C | M | 1 | P.T | IUD | Preeclampsia |
| 259 | 18241 | 28 | Primi | 10/11 | V.C | F | 1.6 | P.T | IUD | Preeclampsia |
| 260 | 18656 | 25 | Primi | 12/11 | V.C | F | 2.5 | P.T | anomalies | Hydramnios |
| 261 | 18737 | 28 | G2P1L1 | 13/11 | V.C | F | 1.75 | P.T | IUD | <8gms |
| 262 | 18809 | 22 | G2P1L1 | 14/11 | LSCS | F | 1.75 | P.T | BA | BOH PROM Handprolapse |
| 263 | 18860 | 24 | G2P1L1 | 14/11 | V.C | M | 1.75 | P.T | IUD | |
| 264 | 18579 | 26 | G2P1L1 | 14/11 | V.C | F | 1.6 | P.T | IUD | <8gms |
| 265 | 18963 | 23 | Primi | 16/11 | V.C | M | 1.75 | P.T | IUD | Hydramnios |
| 266 | 19082 | 32 | G2P1L1 | 19/11 | V.C | F | 2.2 | T | IUD | |
| 267 | 19252 | 26 | G2P1L1 | 22/11 | LSCS | F | 2.6 | T | BA | Rupture uterus |
| 268 | 19381 | 27 | G4P2L2 | 24/11 | V.C | F | 2.5 | T | IUD | preeclampsia <8gms |
| 269 | 19450 | 19 | Primi | 25/11 | LSCS | M | 1.5 | P.T | BA | IP Eclampsia |
| 270 | 19332 | 21 | G4P1L1A2 | 28/11 | V.C | F | 1.5 | P.T | Anomalies | BOH(known Epileptic) |
| 271 | 19614 | 25 | G3P2L2 | 28/11 | V.C | M | 3 | T | IUD | Preeclampsia |
| 272 | 19712 | 26 | G3P2L2 | 30/11 | V.C | F | 3.1 | T | IUD | |
| 273 | 19717 | 23 | G4P3L3 | 30/11 | LSCS | M | 1.5 | P.T | BA | Preeclampsia APH |
| 274 | 19900 | 30 | Primi | 3/12 | V.C | F | 2.25 | T | IUD | |
| 275 | 20183 | 24 | G2P1L1 | 8/12 | V.C | M | 2.8 | T | | |
| 276 | 20183 | 20 | Primi | 9/12 | V.C | M | 2.5 | T | BA | |
| 277 | 20224 | 32 | G3P2L2 | 7/12 | LSCS | F | 2.5 | T | BA | BOH, APH, Preeclampsia |
| 278 | 20126 | 21 | Primi | 10/12 | V.C | F | 1.9 | P.T | BA | |
| 279 | 20296 | 27 | G3P2L2 | 11/12 | V.C | F | 2 | P.T | IUD | <8gms |
| 280 | 20457 | 21 | Primi | 13/12 | V.C | M | 1.75 | P.T | IUD | |
| 281 | 19721 | 26 | G3P2L2 | 6/12 | V.C | F | 3.5 | T | BA | <8gms |
| 282 | 20452 | 32 | G3P1L1 | 13/12 | V.C | M | 1.7 | P.T | BA | APH with preeclampsia |
| 283 | 20742 | 30 | G3P2L2 | 13/12 | A.B | F | 1.8 | P.T | IUD | |

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| 284 | 20736 | 25 | G2P1L1 | 18/12 | V.C | M | 1.1 | P.T | P | |
| 285 | 20716 | 20 | G2P1L1 | 18/12 | V.C | M | 2.3 | T | IUD | |
| 286 | 20754 | 24 | G2P1L1 | 18/12 | LSCS | F | 1.4 | P.T | IUD | Severe preeclampsia |
| 287 | 20891 | 25 | G3P1L1A1 | 21/12 | V.C | M | 2.2 | P.T | BA | severe preeclampsia <8gms |
| 288 | 20810 | 25 | Primi | 21/12 | V.C | F | 2.4 | T | IUD | |
| 289 | 20949 | 27 | G3P1L1A1 | 22/12 | V.C | F | 1.9 | P.T | IUD | |
| 290 | 20883 | 22 | Primi | 22/12 | V.C | F | 1.2 | P.T | IUD | |
| 291 | 21294 | 30 | G4P3L3 | 27/12 | LSCS | M | 2.6 | T | BA | <8gm obstructed labour (Transverse lie) |
| 292 | 21364 | 18 | Primi | 29/12 | V.C | F | 2 | P.T | BA | Preeclampsia |
| 293 | 21314 | 20 | G2P1L1 | 30/12 | V.C | F | 1.1 | P.T | Cong anomalies | BOH |
| 294 | 21436 | 24 | G2P1L1 | 30/12 | A.B | M | 1 | P.T | IUD | |
| 295 | 21449 | 20 | G2A1 | 31/12 | V.B | M | 2.4 | T | IUD | <8gms |
| 296 | 4 | 25 | G2P1L1 | 1/1 | V.C | F | 2.5 | T | BA | APH with preeclampsia |
| 297 | 37 | 24 | Primi | 1/1 | Forceps | M | 3 | T | BA | Obstructed labours |
| 298 | 18 | 35 | Primi | 2/1 | V.C | M | 1 | P.T | P | preeclampsia |
| 299 | 78 | 27 | G4P2L1A1 | 3/1 | V.C | M | 1.1 | P.T | IUD | BOH |
| 300 | 21485 | 24 | G2P1L1 | 3/1 | LSCS | M | 2.85 | T | Congenital anomalies | |
| 301 | 173 | 23 | G2P1L1 | 4/1 | V.C | F | 1.5 | P.T | IUD | Preeclampsia |
| 302 | 213 | 33 | G2P1L1 | 5/1 | V.C | F | 1.5 | P.T | BA | APH with preeclampsia |
| 303 | 297 | 24 | Primi | 6/1 | V.C | M | 2.9 | Postterm | IUD | Prolonged pregnancy |
| 304 | 325 | 25 | G2P1L1 | 6/1 | Laprotomy | M | 3.25 | T | BA | Rupture uterine |
| 305 | 445 | 30 | G4P2L2A1 | 8/1 | V.C | F | 2 | PT | IUD | |
| 306 | 457 | 24 | G4P2L2A1 | 9/1 | A.B | M | 2.6 | T | Anomalies | BOH <8gms |
| 307 | 453 | 21 | Primi | 9/1 | V.C | M | 2.5 | T | IUD | |
| 308 | 489 | 26 | G2P1L1 | 11/1 | A.B | M | 1.8 | PT | IUD | |
| 309 | 571 | 19 | G2P1L1 | 13/1 | V.C | M | 1 | PT | P | PROM |
| 310 | 571 | 19 | G2P1L1 | 13/1 | V.C | M | 1 | PT | P | PROM |
| 311 | 616 | 30 | Primi | 13/1 | V.C | M | 2 | PT | BA | PROM |
| 312 | 20140 | 28 | G4P2L2A1 | 14/1 | V.C | M | 1.1 | PT | BA | Severe Preclampsia |
| 313 | 686 | 28 | Primi | 14/1 | V.C | F | 2.7 | T | IUD | |
| 314 | 7258 | 22 | G2P1L1 | 15/1 | V.C | M | 1.5 | PT | IUD | BOH, Multiple Pregnancy <8gms |
| 315 | 6851 | 20 | Primi | 16/1 | V.C | M | 1.05 | PT | IUD | |
| 316 | 935 | 30/F | G3P2L2 | 19/1 | V.C | F | 1.5 | PT | BA | PROM |
| 317 | 714 | 20 | G2P1L1 | 17/1 | LSCS | F | 2 | PT | BA | |

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| 318 | 1066 | 25 | G3P2L2 | 21/1 | LSCS | F | 2.3 | T | IUD | <8gms |
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| 319 | 1124 | 28 | G3P2L2 | 21/1 | V.C. | F | 1.1 | PT | P | <8gm |
| 320 | 1192 | 22 | G2P1L1 | 23/1 | V.C | M | 1 | PT | P | BOH<8gms |
| 321 | 1403 | 28 | G2P1L1 | 28/1 | LSCS | M | 2.4 | T | BA | Cord Prolapse |
| 322 | 1415 | 18 | Primi | 28/1 | V.C | M | 2.75 | T | IUD | |
| 323 | 1831 | 27 | G3P2L2 | 6/2 | V.C | M | 1.4 | PT | IUD | Rh-ve <8gms |
| 324 | 1843 | 36 | G3P2L2 | 6/2 | V.C | F | 1.5 | PT | IUD | |
| 325 | 1436 | 22 | G2P1L1 | 29/1 | A.B | M | 2.8 | T | IUD | |
| 326 | 1903 | 21 | G2A1 | 8/2 | V.C | M | 2.2 | T | IUD | Rh-ve |
| 327 | 1739 | 20 | Primi | 9/2 | V.C | F | 1.75 | PT | IUD | Epileptic <8gms |
| 328 | 2014 | 25 | G2P1L1 | 10/2 | V.C | F | 2.5 | T | Anomolies | BOH |
| 329 | 1979 | 22 | Primi | 10/2 | V.C | F | 2.7 | T | IUD | |
| 330 | 1982 | 20 | Primi | 10/2 | V.C | F | 1.6 | PT | IUD | Rh-ve |
| 331 | 1785 | 20 | Primi | 5/2 | V.C | F | 2.75 | T | IUD | Preeclampsia |
| 332 | 2053 | 22 | G2P1L1 | 12/12 | V.C | F | 1.5 | PT | BA | Multiple pregnancy<8gms |
| 333 | 2155 | 19 | Primi | 14/2 | V.C | M | 1.5 | PT | IUD | preeclampsia |
| 334 | 2345 | 20 | G3P2L2 | 15/2 | V.C | F | 1.3 | PT | IUD | |
| 335 | 2247 | 25 | Primi | 16/2 | V.C | M | 1.5 | PT | BA | AP eclampsia |
| 336 | 2443 | 28 | G3P2L2 | 20/2 | V.C | M | 1.5 | PT | IUD | Preeclampsia<8gms |
| 337 | 2492 | 25 | G2A1 | 21/2 | V.C | F | 2.5 | Postterm | IUD | |
| 338 | 2629 | 21 | Primi | 23/2 | V.C | F | 2.4 | T | IUD | <8gms |
| 339 | 2780 | 25 | G2P1L1 | 27/2 | V.C | M | 2.5 | T | BA | Obstructed labours IP Sepsis |
| 340 | 2809 | 25 | G2P1L1 | 27/2 | V.C | F | 1.5 | PT | IUD | <8gms |
| 341 | 2790 | 20 | Primi | 28/2 | V.C | F | 2.2 | T | IUD | Preeclampsia Rh-ve |
| 342 | 2900 | 25 | Primi | 1/3 | V.C | F | 2.5 | T | BA | PROM |
| 343 | 2991 | 26 | G2P1L1 | 3/3 | V.B | F | 2.75 | T | Anomolies | BOH |
| 344 | 3011 | 24 | G2P1L1 | 4/3 | V.C | F | 2.25 | T | IUD | <8gms |
| 345 | 3067 | 18 | Primi | 5/3 | LSCS | F | 2.5 | Postterm | BA | Prolonged pregnancy<8gms |
| 346 | 3105 | 29 | G2P1L1 | 6/3 | V.C | M | 1.5 | PT | Prematurity | <8gms preeclampsia |
| 347 | 3113 | 27 | Primi | 6/3 | LSCS | F | 2.8 | T | BA | APH |
| 348 | 3030 | 21 | Primi | 6/3 | LN | M | 1.4 | PT | Anomolies | |
| 349 | 3171 | 27 | G2P1L1 | 7/3 | Breech | M | 1.4 | PT | Prematurity | |
| 350 | 3185 | 20 | G3P2L2 | 8/3 | LN | M | 1.2 | PT | IUD | anaemia |
| 351 | 3201 | 30 | G3P2L2 | 10/3 | Breech | M | 1.25 | PT | IUD | - |
| 352 | 3484 | 24 | G3P1L1A1 | 13/3 | LN | M | 2.2 | PT | BA | - |
| 353 | 3611 | 26 | G2P1L1 | 15/3 | LN | F | 1.8 | T | still born | - |

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| 354 | 3498 | 23 | G2A1 | 17/3 | Breech | M | 1.5 | PT | Cong anomalies | BOH |
|-----|------|----|------|------|--------|---|-----|----|-------------------|-----|